VOL. VIII, No. 2 FEBRUARY, 1916

THE Journal of Home Economics

For those interested in Homemaking, Institution Management, and Educational Work in Home Economics

MRS ALICE P NORTON, *Editor* KETURAH E. BALDWIN, *Managing Editor*

Editorial Board

MRS. MARY H. ABEL ANNA BARROWS C. F. LANGWORTHY ISABEL ELY LORD

Ex-Officio Members—MARTHA VAN RENSSELAER, President American Home Economics Association
SARAH LOUISE ARNOLD, Chairman Institution Economics Section
RUTH WHEELER, Chairman Science Section
GERTRUDE MCCHEYNE, Chairman Extension Education Section

Collaborators—The Officers, Members of the Council, and Advisers

CONTENTS

COSTUME IN THE COOKERY LABORATORY . . . . . *Isabel Ely Lord* 55

THE DEVELOPMENT OF HOME ECONOMICS IN SOCIAL WORK . . . . *Winifred S. Gibbs* 68

THE EXPOSITION PLAQUE 74

A NEW DEPARTURE IN THE TEACHING OF SEWING . . . . . *Edna Irene Avery* 75

THE NEED OF TRAINING TEACHERS FOR EXTENSION EDUCATION WORK . . *Alice Loomis* 78

THE ELLEN H. RICHARDS RESEARCH FUND 81

CALORIES IN THE EDIBLE PORTION OF A NUMBER OF FOODS 82

SANITARY DISHWASHING . . . . . *Bertha Stevenson* 83

FOR THE HOMEMAKER 85

LIVING EXPENSES OF WOMEN STUDENTS AT THE UNIVERSITY OF ILLINOIS . *Cora E. Gray* 85

HONEY AND ITS USES IN THE HOME 87

CANDIED CRANBERRIES 91

GOOD HEALTH COMMERCIALLY CONSIDERED 92

BABY WEEK 92

EDITORIALS 94

BOOKS AND LITERATURE 97

BIBLIOGRAPHY OF HOME ECONOMICS 101

NEWS FROM THE FIELD 103

The Journal of Home Economics is published monthly by the American Home Economics Association.

$2.00 A YEAR. FOREIGN $2.25. SINGLE COPIES 25 CENTS

HOW TO REMIT. Remittances should be sent by Draft on New York, Express Order or Postal Money Order, payable to the American Home Economics Association. Currency, unless mailed in a registered letter, is at the sender's risk.

CHANGE IN ADDRESS. Notice of change in address should be sent Two Weeks before the date of issue on which the change is to take effect. The subscriber's Old Address should be clearly indicated in addition to the New Address.

AMERICAN HOME ECONOMICS ASSOCIATION STATION N, BALTIMORE, MD.

Entered as second class matter at the Baltimore Post Office

Plaque Presented to the American Home Economics Association at the Panama-Pacific International Exposition. (See page 74)

THE
Journal of Home Economics

VOL. VIII FEBRUARY, 1916 No. 2

COSTUME IN THE COOKERY LABORATORY

ISABEL ELY LORD

Director, School of Household Science and Arts, Pratt Institute

As the result of a recent discussion by the Editorial Board, it was decided that the facts concerning costume requirements for class work in cookery would be of interest to all teachers of Home Economics, and that an effort should be made to collect such facts. The questions were to be asked only of colleges, universities and normal schools, and accordingly in May, 1915, there was sent to the 217 such institutions appearing in the list of schools teaching Home Economics—published in the JOURNAL of June, 1911—the following questionnaire:

1. Do you require a costume?
2. If so, how are directions given for making? Attach copy if possible.
3. If not a uniform what requirements do you make as to material of waist and skirt?
4. State any requirements as to color of (1) waist, (2) skirt, (3) collar, (4) tie, (5) cap, (6) apron, (7) any other requirement.
5. Is there any other requirement for collar? If so, what?
6. Is there any other requirement for tie? If so, what?
7. Is an apron required? Of what type? Uniform?
8. Is a cap required? Uniform? Attach pattern if possible.
9. Is there any requirement as to shoes?
10. Is jewelry forbidden?
11. Are students allowed to wear this costume outside the cookery laboratory? If so, where?
12. If a uniform, is it planned for quick dressing?
13. What value do you think the uniform has?

14. Do you attempt to impress upon your students the value of wearing the uniform after graduation, in any professional position?

15. What objection have you to a uniform?

Answers were received from 110 of the 217, 9 replying that they had no work in Home Economics. Of the 101 giving data, 62 were colleges or universities, 39 normal schools (including any college or university having Teacher or Normal in its title).

Of the 101, 3 (1 college, 2 normal schools) have no requirements whatever as to dress in the cookery laboratory. At the other extreme are 18 (13 colleges, 5 normal schools) that require a uniform. Eighty (48 colleges, 32 normal schools) have some requirement as to costume, but not a complete uniform.

The two groups—colleges and universities, and normal schools—were kept separate in compiling the data, since in the majority of the latter the students are to become teachers of Home Economics, while in many of the former there is a large proportion of students taking the work for home use. There was, however, so little difference between the two groups that the figures are given together.

Dress. The data on the different parts of the dress for the group of 80 having some costume requirement are as follows:

Requirement for whole dress	14
White washable	10
Washable (no color given)	4
Recommending a whole dress	25
White washable	21
Washable	4
Requiring washable waist and recommending washable skirt	4
Requirement for waist only	
White washable	21
Washable (1 dark blue)	18
Recommendation for waist only	
White washable	3
Washable	2
Requirement for skirt	
Washable	2
Black cloth	2
Blue serge	2

It should be noted that where cloth skirts are required, they are apparently part of the regular college or school uniform. It is hardly conceivable that otherwise there would be a requirement to wear wool in the kitchens.

Aprons. This is the one point in which there is uniformity as to requirement, for those who require anything.

Apron required	80
Uniform apron	44
Uniform apron with bib	37
Nurse's apron	5
Waitress' apron	1
Must cover skirt	4
Must have bib (even when not uniform)	26

White is not always specified, but is probably always required. Straps over the shoulder are in the same case. The materials, so far as specified, range from lawn through Indian head to butcher's linen.

The tendency seems to be toward uniformity in aprons, as several signify their intention of requiring uniformity in the near future. The reason will be evident to those who have tried general directions for a "plain white apron covering the whole dress" and have seen the extraordinary results that such directions can produce. Frills and hamburg edging vary the plainness, and "all over" is taken to mean the front of the skirt only, and also to require a complete high necked and long sleeved dress. The requirement of uniformity in aprons is a simple one, and has none of the objections urged against the uniform, except that it does not permit the individuality of the student free play.

Cap. Here is the greatest diversity of the whole list:

Require cap	16	Do not require cap	57
which is uniform for	14	No answer, probably do not	6

Even of the 18 that require a uniform, only 5 require the cap, while 12 say they do not, and one not answering, should supposedly be added to this last group.

No special question was asked about the advisability of the cap, but there were a number of remarks about it. The reasons for it seem to be (1) the sanitary value of having the hair covered; (2) the professional look given to the costume; (3) the help in encouraging neat and trim hair dressing and the avoidance of extravagance in this respect. On the other hand, some consider the usual cap (which does not cover the whole head) ridiculous and farcical, two object that they are often unbecoming, and one thinks the hair is better dressed if there is no cap to cover it.

Accessories. The report on these does not seem very satisfactorily full, but is as follows:

Collar:		Prefer low	1
Require white	9	Prefer starched	1
Require turnover	4	Require high tailored	1

One low collar is described as Dutch, one as Buster Brown.

Tie:			
Require white	7	Require black Windsor	1
of these washable	2	Require washable if any	2

Several mention that neck may not be very low, but this would seem to come under the head of general suitability.

Shoes:		Walking shoes required	1
Require rubber heels	5	Black shoes required	1
Recommend rubber heels	4	Low heels suggested	1

It is interesting to note that besides the five here that require rubber heels, there are five more in the "full uniform" group with the same requirement, and one more recommends them. The advantages are great in the way of quiet in the building and of ease to students who must stand for much of their work. The difference as to noise can be appreciated only by those who have tried both ways. The expense to students is not great.

One entertaining answer to this question said that there was no requirement as to shoes, "except they must have shoes of some kind."

Jewelry. The seeming diversity here is probably less in practice than on paper, though some of us have seen rather appalling displays of fancy combs, fancy pins, long chains, rings and even bracelets in some classes in cookery.

Jewelry forbidden	31	Recommended or requested not to wear	5
Rings forbidden	4	Same for rings	3
Bracelets forbidden	3	Disapproved	1
Excessive amounts forbidden	3	Not necessary to forbid	1
None forbidden	6	As little as possible	1
Discouraged	13		

Naturally the schools and colleges that require full uniform offer no place for jewelry, and 13 of the 18 definitely forbid it. In 2 more it is "discouraged," in 1, students are requested not to wear it, and in 1 they are expected to remove their rings.

At one school there is a definite exemption of the wedding ring from the exclusion, in deference to the superstition that with many forbids sit removal for any purpose. But even then students wearing it are asked to remove it during cookery work if they ever take it off for any purpose.

Other Requirements. A good many mentioned under this head the requirement that students have their own holders and hand-towels, but as these are part of the equipment rather than the dress, no account is taken of them here. A few mentioned a requirement of three-quarter sleeves or "short" sleeves, a few the requirement of white cuffs, and a few (where long sleeves are worn) that of over-sleeves.

Quick Dressing. This is an important point, as is shown by the number (23) who gave as an objection to the uniform the time required to dress. Eleven of the colleges and universities and all (5) of the normal schools requiring uniforms said that it was especially planned to permit rapid dressing. The time allowed for this was not asked, and so is not stated. At Pratt Institute ten minutes are allowed for changing into the uniform at the beginning of a cookery laboratory period, and the same time at the end for changing to ordinary dress. With the uniform as planned, and a locker and dressing room set aside for this purpose, the time is sufficient.

Wearing Costume Outside. There seems to be little uniformity of practice in this respect. Of the 18 requiring a uniform, 8 direct that it shall not be worn outside, although in one or two cases it is allowed at a class immediately following cookery. Six of this group allow the wearing of the dress outside, but not the apron (or cap). One allows it in chemical laboratory and sewing class and 1 says it is "not the custom," while 2 allow the whole costume anywhere.

Of the larger group, many did not answer the question. Twenty forbid it outside, 11 allow it anywhere, 14 forbid the apron (and cap) outside, 1 allows the costume in the dining room of the dormitory and 1 in the sewing class.

Directions for Making. Where any part of the costume is uniform, this is a very important point. Of the 18 requiring full uniform, 5 have printed directions, 4 typewritten directions. In one the uniform is a regular college one (with apron); in 1 where it is required only in the senior year, directions are given in the junior year; in 3 the instructor in domestic art gives the directions, in 1 there is a model on a dress form, and in 1 a commercial pattern is used. Samples of material are sent by at least 6. The fullest directions are those given by Pratt Institute, in a printed folder, with cut of the costume, sample of material and blue prints of collar and cuff patterns.

Of the larger group 4 have printed and 3 typewritten directions for the requirements. In 2 the aprons are made in the sewing class. Twelve altogether direct the purchase of commercial patterns. It may be of interest to some to know that the following patterns were given as being used for uniform aprons: Pictorial Review 4930; Ladies Home Journal 7434 (this is one of the universities requiring a uniform); Jones Dry Goods Company, Fort Collins, Colorado, pattern designed for Colorado State Agricultural College (20c. and postage); Butterick 3592

(one of the universities requiring a uniform), 5361 (by three, one requiring full uniform), and 6307. This last is the pattern of the apron used at Pratt Institute, and is required at four other schools.

Cap patterns are furnished by a number of the schools and offer noticeable variety. Some are of the circle type with a frill, covering practically all of the hair, but the majority use a cap covering the top of the head only (like the usual nurse's cap) and it is these that have called forth the strictures reported under the heading "Cap."

Full Uniforms. We may now describe a little more in detail the full uniforms required by the 18. They vary so widely that it is a little hard to give a definite picture, but here are the data:

Whole Dress:

Blue chambray	7	White waist	3
White	3	White aprons	18
Blue wash material	1	White collar	14
Striped blue and white gingham	1	White cuffs	5
Pink chambray	1	White tie	6
Gray chambray for seniors	1	Black tie	1
Blue and white ripplette	1	White cap	5
Navy blue wash blouse and blue serge skirt	1	Rubber heels on shoes	5

A number of the schools (which cannot be stated definitely because the question was not asked) require students to wear white while teaching practice classes, even when the class uniform is of different color. This is, for example, the case at Pratt Institute, where blue chambray is worn for class work.

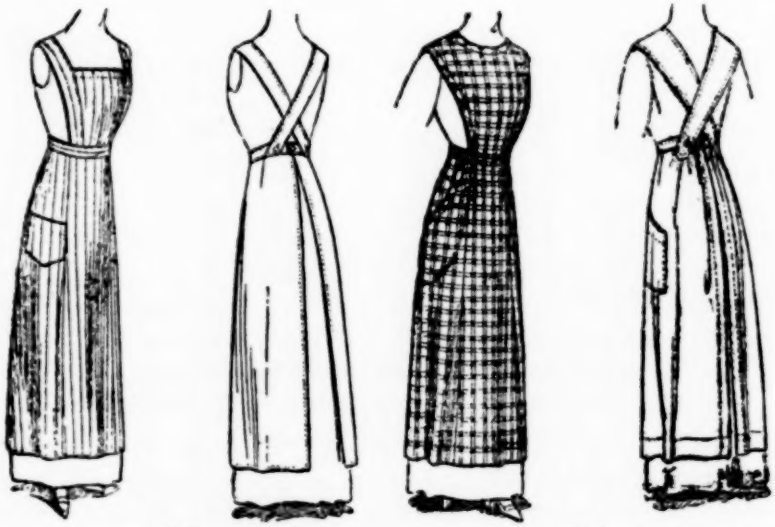
The disadvantage of the white uniform, especially in the cheaper white materials, is that it is very hard to keep clean. Chambray is an excellent textile from this point of view. The colors given here are blue, pink and gray. The reason for the predominance of blue is apparently that it is a more attractive color than gray and does not fade as badly as pink.

A word as to the collar and tie. For many years some of the schools required the high starched linen collar, with a white lawn tie. This was the custom at Pratt Institute, and certainly in some other schools. But with the emancipation from the high collar for everyday wear, this has become very uncomfortable neckwear for most students. Some schools have met this by changing to a turnover starched collar with white or black tie, some use a white piqué turnover collar. At Pratt Institute

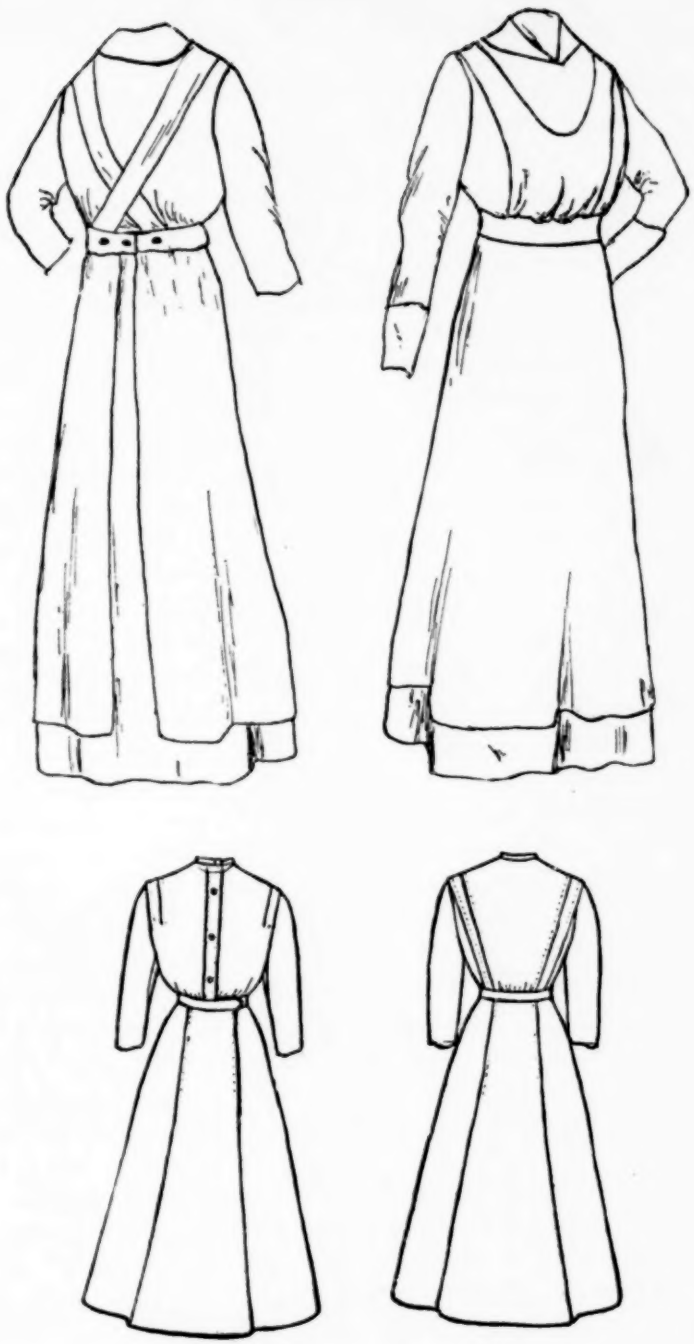
Pratt Institute, School of Household Science and Arts
Butterick Pattern 6307 gives this Apron (used in four other schools)

Ladies Home Journal Pattern 7434 used, with modifications, at Cornell University

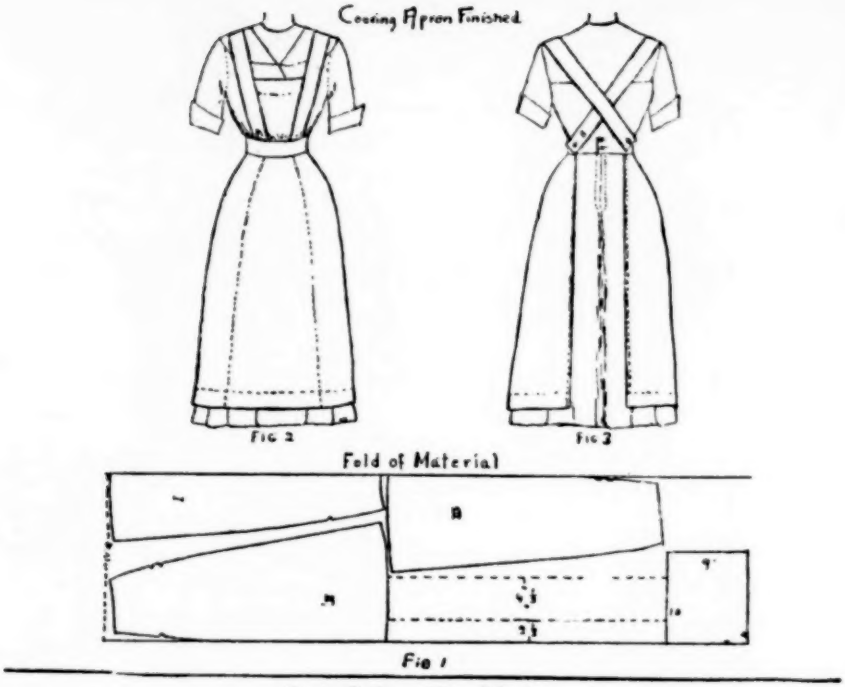
Pictorial Review Pattern 4930 used at Simmons College



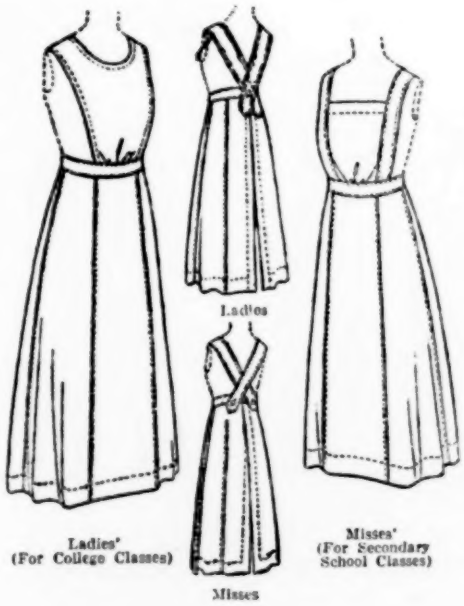
Butterick Pattern 3592. (James Milliken University without bretelles)
Butterick Pattern 5361 (three schools)



Milwaukee Downer College Dress and Apron



State College, New Mexico



Department of Home Economics, Colorado Agricultural College

this year a turnover collar was designed at the School, and blue print of pattern sent all incoming students, the collar to be made of white cotton poplin. The reason for adopting this rather than a starched turnover collar was that it was thought easier with this material to use a pin in place of the white tie. The tie adds to the difficulties of dressing, and on the whole the pin seems to us trimmer. The Pratt pin is a uniform one, a white enamel bar, two inches long, coming to a point at either end. These pins are on sale at the School, to ensure uniformity. The collars made by amateur dressmakers were so far from uniform and many so ill-fitting that students are now required to buy a starched turnover Trouville collar (with cape) when they need a new one.

Value of Uniform. Naturally all those schools that require the uniform consider it valuable and 17 of the other normal schools and 20 colleges also speak in its favor; one normal school and two colleges consider that it has no value whatever. In the reasons given for the value, it is rather difficult to make a classification, as the same general idea is expressed in many ways. "Suitability" is the general word and was used by 10 of the 55 stating a value, while "simplicity" (3) and "standard kitchen dress" (1) undoubtedly belong here, as well as the statement that "it overcomes improper dressing, such as woolen material and low necks." Perhaps here goes best the statement that it "develops pride in appropriate dress." The most important subhead is "sanitary" (12); this with its cognate subjects of neatness (23), cleanliness (9), trimness (2), and orderliness (3), as well as "protecting the dress" (3), altogether is mentioned by 62. "Attractiveness" is not neglected, however. It was doubtless in the minds of all who spoke of neatness and trimness, but was also specifically mentioned by 19, to whom should probably be added one who gave "freshness" as a desirable quality. "Economical" was given three times, the point apparently being the washableness of appropriate dress. Thirteen specify that the appearance of the class is better. That this is not purely a formal matter is shown by the statements that there is "better order in the laboratory—less confusion" and that the "psychological value of the uniform is considerable, in making for orderliness and workmanlike ways." Perhaps the one who gives "discipline" means to make this point. "Dignity" because of the professional factor given by the uniform, is mentioned by 6, while one uses the phrase "businesslike," one points out that there are no excuses for inappropriate dress possible and another

calls attention to the fact that grading according to appearance is more just where uniformity is required. One speaks of the good influence on the students' dress outside the cookery laboratory and another speaks of the good influence on the children (this of course in teaching). One states as an advantage that the uniform strengthens the democratic spirit.

Objections to the Uniform. It is impossible to resist the temptation to quote first the antithesis of the last statement under "Value"—the normal school that says: "It is institutional, artificial and undemocratic!" But the largest number of objections come under lack of time for changing dress (23), lack of space for dressing and lockers (12), and expense to students (18), of whom 4 specify laundry expense. Eight speak of the uniform as "impractical" which probably refers to the points above. One speaks of the waste of energy in changing, one of the hardship of getting dresses made alike, and one gives the curious reason that it is an "effort to see that they are kept in good condition."

None of these objections (except the first) is to the *principle* of the uniform, and it is such objections that have most weight. To take the less important points first, one says it "is difficult to get a uniform suitable to all," one that it is "too much like a prison dress." (One would think that depended on the uniform!) Three prefer "individuality," one stating that it gives a better chance to teach simplicity and fitness, and one wishes the students to look as they would at home, and thinks a woman has an inalienable right to wear a becoming tie.

The most serious objections, however, are those voiced by the first normal school head quoted, the college that objects that it "sets household science apart" and the fuller statement made by Miss Jenny Snow, of the Chicago Normal College, as follows: "I think the uniform has had more to do with the misunderstanding of the real purpose of our work than any other one thing. It has led people to think that this is a training for maids. No uniform is required in the bacteriological laboratories, chemical and physiological laboratories. Why should it be in the food laboratories?"

Wearing Uniform in Professional Work. This is of course quite a different question from that of the wearing of uniform by students. Many of the schools that object to the latter, encourage the students to wear it in teaching Home Economics or doing institutional work. Forty-one schools and colleges definitely try to impress on students

the desirability of wearing a uniform in professional work, while 3 recommend "plain white" for teachers, and 4 recommend "a wash dress, or a cotton dress." Only 5 answer "no" to the question, one emphatically adding "never." Two say "not directly."

General Conclusions. The report on a questionnaire is no proper place for an argument, and the reporter resists the strong temptation to "say the last word." But one fact seems to stand out clearly as a result of the data collected—the need of some standardizing of the uniform if it is to be worn, especially of the universally required apron.

This does not mean that we should have a single Home Economics uniform for the whole country. Even the training schools for nurses have not gone quite so far as that, and there would certainly be no advantage to our work in doing away with individual choice in color and even in style. But each school that has adopted a uniform, in whole or in part, has worked out details with care. A comparison of each point—for example, one piece dress or two piece? Type of collar and how fastened? Length of sleeve? Length of skirt from ground? Straps on apron? Pocket on dress or apron?—should result in the working out of two or three standard types for each article of the dress. The points to consider are (1) sanitary quality—protection and ease of keeping clean, (2) economic qualities—original cost and cost of cleaning, (3) time quality—quickness of dressing and undressing, (4) efficiency qualities—comfort and adaptability to the work, (5) the aesthetic quality—attractiveness. Every article of dress can be considered from all five of these points of view and there is no question but that except for the last there would be general agreement on no more than two or three "best ways." Then one of the large commercial pattern companies could be asked to carry all the patterns agreed on, and the work of giving directions would be greatly lessened. It would also be a help to the housewife who wishes to choose suitable dress or apron, to have such patterns available. If two or three styles of aprons for kitchen work were approved by the American Home Economics Association, it would be an easy matter to get some manufacturer of aprons to put them on the market. When we have all this experience, why not put it at the disposal of the woman in the home?

THE DEVELOPMENT OF HOME ECONOMICS IN SOCIAL WORK

WINIFRED S. GIBBS

Supervisor, Division of Home Economy, New York Association for Improving the Condition of the Poor

Beginning in 1906 when lessons in simple diet and cooking were given to the women in their own homes, this work of Home Economics in the so-called Relief Organization has advanced steadily until at present it is a separate division and bears an intimate relation to the general scheme of the New York Association for Improving the Condition of the Poor. The aims of this work are to aid in preventing dependency, to assist in stamping out dependency by teaching the wise use of relief, to aid in preventing illness, and to relieve illness, if possible by dietary measures.

HELPING TO PREVENT DEPENDENCY

The Division of Home Economy aims to help the Relief Bureau to make definite plans for family rehabilitation, and then to teach the families how to carry out these plans. In self-supporting families, where the income is nearly or quite adequate, it is usually a matter of instruction alone. At best, these families are so perilously near the danger line, that, in order to accomplish much in the prevention of dependency, they must be taught to husband every resource. This usually means the teaching of system—its value and its application. In cases where the resources of the family are equal to the sum estimated as adequate for their support, the housekeeper is questioned as to her knowledge, and then, if necessary, she is taught how to keep accounts. The woman's first expense account is the peg upon which to hang further instruction.

The main items of the budget plan are: rent, food, fuel and light, clothing, insurance, carfare, and sundries. The rent is usually a matter of making the best of conditions, after a certain standard (two and one-half persons to a room) has been met. The food is estimated at twenty-seven cents per adult man per day; food needs of women and children are computed according to an accepted table of percentages, determined by age and sex. Data in regard to clothing needs is being gathered, but pending the time when these needs can be standardized, a rate of two dollars per individual per month is used. It will readily be seen that clothing needs can not be so definitely fixed as can food

needs. The two dollar rate, however, provides for comfortable, but very simple clothing. Long experience in the field convinces that the general morals of the family can be materially strengthened by education in neatness and suitability of clothing.

An attempt was made to get the families to confine their insurance expenditure to that of the bread winner, on the principle that it was better to spend the money for bread and milk than for children's insurance, thus putting off the evil day of the funeral. It was found, however, that the people cling so tenaciously to the certainty of a decent burial that no one had the heart to insist on their dropping the payments. Studies of needs for sundries are now being carried on, and a tentative rate of two dollars per month is allowed. Results are tending toward the final decision that four dollars is the "irreducible minimum." The great lack in these estimates is a provision for recreation and savings, although the latter item is all too seldom even a possibility. Furthermore, it does not seem possible for relief plans to take account of money for recreation, although no worker fails to realize its importance.

By way of illustrating the method of teaching where instruction alone is given, and where the aim is prevention of dependency, the following experience with a family designated as A is given. This consisted of a man, woman, girl of 4 years, and a baby of 2 years.

MONTHLY BUDGET OF FAMILY A

Income	*Estimated Expenditures*	
$52.00	Rent	$7.00
	Food	21.29
	Fuel and light	3.25
	Clothing	6.00
	Sundries	2.00
$52.00		$39.54

Home Economy work was begun in March, 1914. In spite of adequate income, the woman had asked for milk at the milk station, because she did not receive enough money from the man to cover household expenses. After investigation it was found that each brought accusation against the other. The man, who was said to illtreat the woman, in turn said that the woman was such a bad housekeeper that it was impossible to give her an adequate home keeping allowance, and that he had no incentive to live properly. Lessons were begun, and the woman was taught that a clean home and well cooked food would do much to

inspire her husband with a desire for better living. Progress was slow, but in August, 1914, great improvement on the part of the woman was noticed. The home was clean, the expense accounts were well kept, and the diet directions were followed. Thus far the man is not doing his part so well, but he has been given at least every chance.

HELPING TO ELIMINATE DEPENDENCY

Once the family has dropped below the "poverty line," the teaching follows a different plan, or rather plans, since a different problem presents itself in every case. Three illustrations may be cited here.

The following case illustrates instruction where income is insufficient and relief not advisable. In this family B, Home Economy work was begun in July, 1914.

MONTHLY BUDGET OF FAMILY B

Income	*Estimated Expenditures*	
$47.66	Rent	$11.00
	Food	27.05
	Fuel and light	3.25
	Clothing	6.00
	Insurance	3.25
	Sundries	2.00
$47.66		$52.55

The above budget is for an average month and shows what could have been done, except for the pressure of back debts. Because of these debts the income was insufficient and when the dietitian began the work the woman was so discouraged that she showed very little interest. Lessons were given in housekeeping, the selection of food, the diet needs in the family, and the preparation of food. This is a typical case of the necessity for teaching the wise use of a minimum dietary. In August, 1914, the undernourished condition of all the family was such as to cause anxiety, but the Relief Department thought best not to take up the matter. Diet lessons continued, and, although the death of one child brought a new sorrow, when Home Economy work was closed in September, 1914, general conditions were improved, and the woman had been made to feel that it was worth while trying to make the most of a very limited income.

Instruction during temporary loss of employment is illustrated by the following experience. In the family C, under normal conditions, the

income was sufficient, but the dietitian was asked to give lessons to the oldest girl while she was out of employment. These lessons included instruction in the selection and preparation of food, and in general housekeeping. The plan here was to teach the oldest daughter to become a good housekeeper, so that she might help her mother, a hard working janitress, and also better fit herself for a home of her own. Progress was satisfactory, although at the time of writing the work has not continued over a very long space of time.

The following experience illustrates a case of instruction in raising the family standard in treating intemperance. The family D, consisted of a man, a woman, three girls, aged 10, 8 and 5, and a boy of 5 years.

MONTHLY BUDGET OF FAMILY D

Income	*Estimated Expenditures*	
$52.00	Rent	$16.00
	Food	31.12
	Fuel and light	3.25
	Clothing	10.00
	Carfare	3.46
	Insurance	3.37
	Sundries	2.00
$52.00		$69.20

When lessons were begun the woman took very little interest, but as the work progressed she was decidedly impressed with the importance of having proper food for her husband, and also a clean house. Both the man and woman were finally brought to the point of coöperating; the visitor's efforts with the man were successful, and at present writing the woman continues to do her best in keeping up her end.

HELPING TO PREVENT ILLNESS

Almost every case that comes to the Division might fall under this head, directly or indirectly, since proper feeding has much to do with the prevention of illness.

Family dietaries are planned very carefully so that the maximum of nourishment may be obtained for the minimum of expenditure. These dietaries have been planned along scientific lines, but it has not been the practice of the Home Economy Division to make close laboratory studies of these diets. It is interesting to note however that the Teachers College Survey of these diets made in August, 1914, proves that the practice of the Association has been satisfactory from the dietary standpoint.

This study was made in connection with the standardizing of grocery orders. Four typical orders were submitted, each representing the possibilities of Association families. It was found that these diets, after some minor changes, were such as to furnish the families with food that satisfied the demands of physiological chemistry.

To illustrate teaching where it is aimed to prevent illness by teaching proper diet, the following case is noted of an Italian family designated E, consisting of man, woman, and seven children ranging in age from one to fourteen years.

AVERAGE MONTHLY BUDGET OF FAMILY E

Income	*Estimated Expenditures*	
$39.00	Rent	$9.00
	Food	40.13
	Fuel and light	3.25
	Clothing	14.00
	Sundries	2.00
$39.00		$68.38

The visitor requested the dietitian to revise the family dietary and the following interesting fact was noted. The deficit was $28.18 and the woman's expenditure for food before instruction was $26.78 when it should have been $40.13. A careful study of the dietary showed that the food was well selected, and a special mathematical study was made which showed that the dietary fully met the needs of the family in proteid, fat, ash, and caloric value. This seems to prove conclusively that the Association is justified in having different standards, so far as money is concerned, for the Italians. It does not mean that the Italian diets are all satisfactory, but in this particular case revision was not necessary. This case shows well one part of the diet work in doing preventive teaching. The mother was taught just how her dietary met the needs of the family, and it was impressed upon her that it would not be safe to decrease the food in any particular.

Another case to illustrate the value of diet in preventive work is that of a family designated F.

When Home Economy work was begun, the woman was receiving a weekly allowance of $6.25, but it was found that she was saving money at the expense of her food and so her allowance was lowered. After adjusting her allowance and the expenditures, the budget was as follows:

MONTHLY BUDGET OF FAMILY F

Income		*Family Expenditures*		*Adequate Expenditures*	
Woman sewing	$4.33	Rent	$15.00	Rent	$15.00
Allowance (was $27.58)	20.58	Food	18.84	Food	18.84
Lodger	15.00	Fuel and light	1.16	Fuel and light	3.25
		Clothing	6.16	Clothing	6.00
		Insurance	1.43	Insurance	1.43
		Sundries	3.72	Sundries	2.00
	$39.91		$46.31		$46.52

The woman was found to be an excellent manager, but it was explained to her that it was very dangerous to cut down to such an extent on the children's food, and the instruction was directed along the line of gradually showing the woman how to advance to a normal dietary, the plan being to return to the adequate allowance as soon as she showed a disposition to profit by the instruction.

TO RELIEVE ILLNESS WHEN POSSIBLE BY DIETARY MEASURES

It has often been possible to relieve serious illness of young children and babies simply by proper attention to feedings. Another type of case where palliative measures are possible is in that of the return Sea Breeze Hospital cases. This form of instruction is illustrated by the following case.

After returning from Sea Breeze Hospital, the girl who was convalescent from tuberculosis of the bone had lost ground rapidly. Her diet before instruction consisted chiefly of fried eggs, no cereals, condensed milk, salt meat and bread. The mother was taught to buy bottle milk daily and was instructed to give the child beef juice, fresh vegetables, and cereals, with the result that the child was decidedly improved at the end of instruction. It is gratifying to note that in May, 1914, the girl had had a "good winter with no return of foot trouble."

DEVELOPMENT OF THE WORK

The Home Economy work has developed along very broad lines. At present, the clothing item of the budget is being carefully studied by the sewing teacher as she gives her lessons. This means that very careful clothing budgets are being gathered, that the estimate of clothing needs is as carefully studied as that of the food needs and that much helpful data is being collected. The sewing teacher and dietitians work together in teaching practical division of income.

The sewing teacher is publishing a pamphlet entitled Clothing the Family. This pamphlet is to be uniform with Lessons in Proper Feeding, by the author of this article, and is a small handbook. Another important piece of work being done is work in experimental cookery. This means the careful revising of ordinary cook book recipes so that expenses could be cut down to the very smallest amount compatible with palatableness. This is most important in the construction of attractive and nourishing minimum diet. If the work is done by a judicious person there is a saving from 15 to 50 per cent in the cost of each recipe. The division has already gained as a result of this work a collection of recipes absolutely invaluable and wholly unique.

As to the future, the possibilities for coördinating this Home Economy work with other forms of social work are very numerous, and it is hoped that in the near future many of these possibilities may be fulfilled.

THE EXPOSITION PLAQUE

At the meeting of the American Home Economics Association, held in connection with the National Education Association, at Oakland, California, a dinner was given by the California Association of Home Economics, at the California Exposition Building, to the guests of the American Home Economics Association.

At that dinner a bronze plaque was presented by the Assistant Chairman of Congresses of the Exposition, who remarked that this Association was one of nine hundred ninety-nine, held in San Francisco this year. The reply was made that we considered ourselves one in a thousand.

The plaque will be kept among the archives of the Association. Its form and inscription are shown in the frontispiece.

A NEW DEPARTURE IN THE TEACHING OF SEWING

EDNA IRENE AVERY

State College for Teachers, Albany, N. Y.

The Home Economics Department of the State College for Teachers in Albany has inaugurated a new departure that is filled with interest and promise. It was found that under the general method of teaching elementary sewing the students were not sufficiently well grounded in the subject matter that they were to impart to the girls in their practice teaching classes. The criticism was also made that sewing is not a subject that will develop the mental processes and therefore is not on the same educational basis as the academic subjects in the college curriculum.

To overcome the former difficulty and to confute the latter criticism it was decided to approach Freshman Sewing in a different way. To fully appreciate this change one must remember that this institution has one problem only: that of training teachers.

The entering class was divided into two sections, those who had had no sewing and those who were familiar to a greater or lesser extent with the *use* of the needle either through domestic art courses in high schools or long use in the home. The subject matter covered in both sections is the same but the method of approach entirely different. In the former section, emphasis is placed upon technique (motor habits of sewing) and in the latter, upon subject matter (knowledge of sewing). It is the work of this latter section that has proved to be absorbing to both students and instructor.

An outline of the work is as follows: The ground covered during the year is divided into six unit groups.

Group I. The worker, tools, simple equipment.

Group II. Stitches, consisting of all the plain and a few simple embroidery stitches.

Group III. Principles of sewing, including repairing.

Group IV. Machines, their construction, use, care, repair, etc.

Group V. Drafting and commercial patterns.

Group VI. Construction of underwear.

The number of lessons allowed each group varies. More time is given to Group VI than to the others and least to Groups I, IV, and V. In all groups except the last, actual sewing is of a minimum amount

while the discussion and acquisition of knowledge concerning the topics is at the maximum. In other words, this group *thinks* sewing rather than *does* sewing and therein lies the value of this scheme. It will be seen that such a method naturally can only be adapted to those students who have had some experience in the technique of the art of sewing.

A brief description of some of the interesting things done will show the working out of the plan and perhaps be suggestive. In all groups the students are given topics for discussion, criticism and comparison and are sent to all available libraries and other sources for facts and information concerning these topics. It is really research work that they are required to do and the desire with which they respond exceeds the expectation of the advocates of this plan. Some of the topics discussed under Group I were: The worker (the domestic art student), her attitude toward her work, her method of working, economy of time, energy and nervous force, position of body conducive and nonconducive to health, ease and facility in working and the value of a standard in order to improve the quality of work. When the subject of tools was reached the class discussed their manufacture, specific uses of each tool, varieties and adaptabilities, cost, how and where to purchase and comparison with the object of discovering the most suitable for different classes of work. This readily led to a consideration of proper equipment for elementary and high school sewing.

In Group II the same method was employed with an occasional sewing test when in the judgment of the instructor it was deemed necessary. The stitches were discussed and criticised as to the various ways of beginning, joining, working and ending with the view of selecting those that seemed superior in workmanship, in facility in making and in speed. It may seem to one that there was a waste of time in this, but not so. The class recitation became so intense and animated that there is not a member of the section who does not possess accurate, scientific knowledge of good stitchery. Whenever sewing was done, it was given as a problem and the students were forced to work out their method of construction and application in the light of their previous class discussion. Hence, the sewing became a test of the student's ability to correctly apply her knowledge of sewing subject matter.

In Group IV, the study of machines, the students were required to learn the construction, physics and mechanism of a sewing machine.

One of the local machine agents kindly loaned twenty-five machines of different makes which, added to the regular college equipment, allowed a machine to each girl. The men's industrial department offered to assist in the explanation of mechanical principles. Instruction was given in the proper use, care and simple fixing which machines constantly need in order to run properly. After this, any student in the class is liable to be called upon to oil, take apart and adjust any machine in the laboratories which happens to be out of order or does not run smoothly. Many problems and exercises were given which required speed, accuracy in straight stitching and the use of the various attachments.

By the time the student has reached Group VI she finds herself in independent command of the use of patterns, all principles of hand and machine sewing and is expected to construct undergarments with little help and assistance. The sewing laboratory will now be more like a shop and although no garments will be made for the trade, each student will sew for some member of the class other than herself. Here technique will be of prime importance as well as speed, accuracy, responsibility, independence, and ability to work satisfactorily for others. There will also be opportunity for suggestion and original design.

It may be of interest to the reader to know the connection between the two sections. By keeping the unit groups parallel it is possible to shift students from one section to the other and this is done in the case of misfits. Those who lack the prerequisite for entering the advanced section must do one year's work in the lower section and take some of the unit groups the following year. The ones required will depend upon the ability and quality of work of the student while a member of the lower section.

The results hoped for are mastery of knowledge covering elementary sewing, capability, independence, speed, and accuracy, while the study and research work in the earlier groups provide sufficient mental activity on the part of the students to show that domestic art work *does* require the use of the mind in solving its problems, *does* develop force, character and power in addition to serving its very practical and essential end—the clothing of the human race.

THE NEED OF TRAINING TEACHERS FOR EXTENSION EDUCATION WORK[1]

ALICE LOOMIS

Professor of Home Economics, University of Nebraska

Civilization is characterized by the division of labor and the development of specialists. If we are to make progress in extension work, we must follow the same path of advance and train the specialist. The two objections commonly urged against this are that the homemaker has such a wide variety of problems that the one who is to help her must be able to deal with many phases of home life, and that there is not enough money to employ a separate specialist for each group of problems.

Yet, a brief comparison of the home conditions of today and of previous times shows that the present homemaker in her dependence upon industries outside the home has herself become something of a specialist. Her need is for very definite help along lines requiring technical training rather than for the enthusiasm and good recipes which in the past have been considered a large asset. The other objection may be met by developing the extension work largely along the particular lines for which the workers are especially adapted. An illustration in point is the recent employment by a college of a woman whose architectural and other training has especially fitted her for the task of getting in shape material that others may use in working toward better housing conditions.

The extension worker must of necessity possess the three requisites so commonly demanded of her: first, the personality which will allay antagonism and arouse enthusiasm in the most difficult of situations; second, the keenness of mind which insures insight into the problems and a foresight that makes for effective work; and, thirdly, the natural adaptability which allows the extension worker to do everything from judging babies and crochet work to giving advice on subjects ranging from installation of water supplies to the embalming of bodies.

Given these qualifications those individuals should be chosen for extension training whose previous life as well as whose formal education, has fitted them for certain phases of the work. One of the successful leaders of boys' and girls' club work was largely prepared for her present success by the years she spent as county superintendent. This

[1] Presented at the Eighth Annual Meeting of the American Home Economics Association, Extension Education Section, Seattle, 1915.

woman knows thoroughly the rural conditions, the handling of boys' and girls' problems, the presenting of work to the ordinary rural school teacher, and thereby the means of coöperating with some of the various agencies which must be recognized in the successful management of boys' and girls' club work. When asked what preparation she would most have preferred for her work, she answered that while she would not give up one whit of her actual experience she would like to have had in addition to the regular college course, the special training in Home Economics and, equally important, a four years' course in agriculture. The best director of women's club study may be a woman whose life has given her not only an acquaintance with the household problems, but a knowledge of the workings of women's clubs. An example could be given of such a woman who has been unusually successful in representing the work of the university in her connection with over three hundred clubs, many of them rural and unfederated, but others strong federated clubs in close touch with the General Federation work. She is only one of a number of women with the housekeeper's point of view who also have had the opportunity to know how the training of specialists can be made of value to people outside the college. These women need not be graduates of technical courses but they must be intelligent women who are coöperators and organizers of the first order, knowing, on one hand, the needs of the community, and, on the other hand, the means whereby these needs may be met by specialists within the colleges, medical schools, and other organizations.

There is no doubt that an ideal situation exists in an institution whose graduates have had this other and larger experience. Illinois is one of the few states in which the course in Home Economics has been established long enough to have graduates in their own homes who can be called upon for part time in the service of the Extension Division. It is this state also which is fortunate in having among its graduates women available for extension service who previously have been well trained in the business world or who have been trained as nurses and social workers.

Within our college courses there are a number of women whose previous training and experience suggest their possible value in the extension field. For these people there should be a definite course in extension methods. This should be preceded by the courses in psychology, child study, history of education, and other courses considered prerequisite to such special method courses.

However well trained a worker may be in general, there is always the necessity for local color. College standards are fairly definite and no one now believes that there is a need for the training of teachers of college grade in the locality where they are to teach. In fact, the dangers of inbreeding are clearly recognized. Exactly the reverse is the case in extension work. The worker should not use six months or a year in becoming acquainted with the individual problems of her locality. This local color may be obtained by choosing a person who has grown up in the community or has in some other way gained a vital contact with its needs. It may also be gained by a short apprenticeship. In one case recently a successful worker from another section of the country was to begin work in a place necessitating entirely different methods. Throughout the summer she attended meetings conducted by experienced workers. Without doubt this method is of great value in introducing extension workers to their fields.

The most serious question in the training of extension workers seems to be the problem of the continuation of training for those already in the field. Their needs are two: first, the technical training which will enable them to keep abreast of the more recent advances in their work and to substitute for the "broad brush work," as Miss Ravenhill calls it, the careful and accurate thinking which a technical course demands; and, second, the need for the broad educational work that shall keep them in touch with what is being done in extension work in other states, thereby preventing needless repetition of errors and experimentation, and that shall also help them to see their extension work as a part of the general educational movement.

It is to be hoped that in the near future courses will be offered for extension workers which will meet these two great needs. A summer school with this purpose would be of value. The technical work might allow a choice between several lines, some at least of which should be of graduate grade, for workers prepared for such work. There should be no difficulty in offering graduate courses in education of value to extension workers since the doctor's degree is now granted in education. Besides these technical and collegiate educational courses there might be a course, possibly non-credit, but at least of no more than undergraduate grade, in extension methods. Since the work has developed so quickly and so differently in various sections of the country, this course might be made of the greatest service if it were offered in small units by various workers who have accomplished noteworthy results in special lines. With the inauguration

of such a summer course, with the careful choice of college students who are especially adapted for this type of work, with the growing number of Home Economics graduates who have gone out into their own homes and are willing to give a part of their time to the service, and with an organization of the extension service that will allow the employment of good coöperators whose life experience has trained them for certain fields—with development in all these lines, the problem of the training of extension workers should be at least partially solved.

THE ELLEN H. RICHARDS RESEARCH FUND

In January 1913 there was presented to the Massachusetts Institute of Technology a fund of $15,000 in memory of Mrs. Ellen H. Richards, to be known by her name, and to be used for research work in Sanitary Chemistry, the subject which she successfully and inspiringly taught for so many years at the Institute. For the past two years this work has been under the general direction of Dr. John F. Norton, Assistant Professor of Chemistry of Sanitation. The February number of the *Journal of Infectious Diseases* contains an article by Professor Norton and the holder of the Ellen H. Richards Research Assistantship, Mr. P. H. Hsu, giving the results of the work done in 1914–1915. The problem involves the application of physico-chemical methods to the study of disinfection. Formic acid is used as the disinfecting agent because its properties and constants are either well known or can be easily determined. *B. typhosus* is the organism studied.

The first part of the article deals with experiments which show that the hydrogen ion is the real disinfecting agent, while the formate ion and the undissociated molecule have no direct action, but the presence of both influences the action of the hydrogen ion, the former having an accelerating and the latter a retarding influence. The apparent disinfecting power of formic acid solutions is due to the combined action of these three substances.

The second part deals with the effect of neutral salts. These are shown to act as accelerating agents on the disinfecting power of the hydrogen ions obtained from the acid. The article is preliminary to one to follow, which will deal with the mechanism of disinfection.

CALORIES IN THE EDIBLE PORTION OF A NUMBER OF FOODS

In calculating the food values of meals, it would often be a convenience to have a table giving calories per ounce instead of the more usual calories per pound. The following may therefore prove of interest. The values given are for the edible portion of uncooked foods and foods ready to eat without further preparation.

ENERGY VALUE OF SOME COMMON FOODS

	calories per ounce
Apple butter	50.8
Apples, dried	84.4
Apples, fresh	18.1
Apricots, dried	80.6
Apricots, fresh	16.9
Bananas	28.8
Barley	103.1
Beans, canned: kidney	30.0
Lima	30.0
navy	37.5
Beans, dried: kidney	100.5
Lima	101.5
navy	100.3
Beets	13.4
Bread: graham	75.6
rye	73.8
white	75.9
whole wheat	71.2
Butter	225.3
Butterine	220.3
Cake, average	104.7
ginger bread	104.7
Cabbage	9.1
Canteloupe	11.6
Carrots	13.1
Celery	5.3
Cheese: American:	
cream	121.9
pale	128.4
red	135.3
Italian:	
common yellow	115.1
Parmesan, little fat	94.1
Swiss	125.6
Corn, canned	28.4
Corn flakes	105.0
Corn meal (granular)	103.4
Corn on cob	29.4
Cornstarch	104.7
Crackers, graham	122.2
Crackers, white (soda)	120.3
Cranberries	13.4
Cream	56.9
Dates, dried	100.9
Eggs	45.0
Farina (wheat)	105.3
Figs, dried	92.2
Flour	104.0
Leeks	9.4
Lentils, dried	101.3
Lettuce	4.7
Macaroni	104.0
Meat: beef, fresh, (side, medium fat)	79.0
beef, dried	52.5
beef soup (homemade)	7.5
chicken (broilers)	31.6
chicken (fowl)	65.3
codfish, shredded (salt boneless)	30.6
steak (fresh)	23.1
duck	80.6
goose	114.4
lamb (side, without tallow)	81.3
mackerel, fresh	40.3
salt	84.0
mutton (side, without tallow)	97.5
pork, fresh (loins, medium fat)	98.8
salt (bellies)	200.0
rabbit	28.6

	calories per ounce
Meat: salmon, canned	57.2
fresh	57.4
turkey	85.0
veal (side)	44.7
Milk	20.3
Milk, buttermilk	10.3
Molasses	80.6
Noodles	104.0
Onions	14.1
Oranges	15.0
Parsnips	18.7
Peaches, fresh	11.9
dried	80.5
Pears, fresh	18.4
dried	102.2
Peas, canned	15.9
dried	103.4
Pickles, cucumber	4.4
Pickles, mixed	6.9
Potatoes, Irish	24.1
sweet	35.6
Prunes, dried	8.75
Raisins, dried	100.3
Rice	101.9
Rolled oats	115.6
Shredded wheat biscuits	106.3
Sauerkraut	7.8
Spaghetti	103.8
Spinach	6.9
Sugar	116.3
Sirup (corn)	70.0
Tapioca	103.1
Tomatoes, canned	6.6
fresh	6.6
Wheat breakfast food	108.8

SANITARY DISHWASHING

BERTHA STEVENSON

Laboratory Kitchen, Boston

The usual method of washing glasses, cups and silver in the best restaurants is the hand method, which is about the same as that in use in private houses. But many restaurants, including those of a firm very well known in a number of our large cities, merely rinse the glasses and many soda fountains have a sort of squirter which dashes cold water into the glasses. In the Laboratory Kitchen, we found that we could not use very hot water by the hand method and therefore adopted the use of dishwashing machines for glasses, cups and silver. These machines are merely sets of iron tubs, fitted with steam pipes as well as water pipes. There is a tackle over head, and the glasses, cups and silver are plunged into the tubs in baskets. Live steam is injected into the rinsing tub, and when the glasses come out they are so hot that they cannot be touched for a few minutes.

The manufacturers of these iron sinks did not believe that we could

use them successfully for either glasses or silver; they said it had never been done before. They claimed that the breakage would be prohibitive in the case of glasses, and that the wear and tear on the silver would be too great. Such is not the case, however, in our experience. We find the method to be satisfactory and we believe it to be the cleanest method yet found.

As for the usual form of sterilizers, such as are used by the Walker Gordon Company for milk bottles, their size stands in the way of their general adoption in the crowded parts of cities. Soda fountains would have to move out when the sterilizers moved in. Then, too, the time required for each separate sterilization, and the labor required in handling the glasses and other pieces, make the sterilizer a difficult problem; but a sterilizer could be especially designed for this work with reference to economy of space and labor. It would have to be worked out to its last detail and lend itself to the direct stream of work, or it would merely look impressive and yet fall entirely short of its purpose. It would be a very easy thing for any soda fount or restaurant to install a sterilizer for show, but to live up to a real sterilizer of sufficient capacity to sterilize each and every piece of silver and glass, is quite another matter.

With regard to the importance of equipment in general, we reckon that the model equipment of every sort counts less than half in securing cleanliness. Clean premises, clean people, and clean methods count more than half. Also, it is evident that the purpose of any equipment, such as a sterilizer, could be defeated if the employees were not educated in clean methods.

There are three things which any restaurant can undertake and which would change the whole face of things as to cleanliness:

1. To make the premises clean by setting out all fixtures from the walls and removing dirt catchers, as far as possible, and by using plenty of soap and water.

2. To make the employees clean by medical inspection and supervision.

3. To make the methods of all employees clean by intelligent training and supervision.

Clean methods should be first, then new and better equipment.

FOR THE HOMEMAKER

LIVING EXPENSES OF WOMEN STUDENTS AT THE UNIVERSITY OF ILLINOIS

CORA E. GRAY

Many parents who are planning to send a daughter to college are interested to know something of her necessary expenses. There have been lately a number of studies made of the actual accounts of students, and some of them we shall publish as they are available. The following paper gives a summary of such expenses in a state university in the middle West.—*The Editor.*

During the second semester of last year the students in the Household Management class at the University of Illinois were required to keep their accounts for the three months ending May 15, 1915. The class was composed of juniors and seniors in the Household Science Department who lived in boarding houses, sorority houses, in the Young Women's Christian Association house, or, in one or two cases, in light housekeeping rooms. The University is located in a community of about twelve thousand, composed of the two towns of Champaign and Urbana.

The table below summarizes the expenses of fifty-three students for three months. Since the accounts were started after the beginning of the semester, they do not include tuition nor, in most cases, textbooks. The classification used was decided upon by class vote, and needs little explanation. "University activities" includes club dues, lectures, and any other expenses directly connected with academic interests. "University expenses" covers books bought during the semester, paper and other supplies, and railroad fare home over the Easter vacation, since the expense of reaching the institution is properly a part of the cost of a college education. In order to give as fair an idea as possible several figures have been given under each classification: the average, the minimum expenditure reported, and the maximum. It is of interest, however, to know whether the majority spent about the average amount, or whether the expenditures were fairly

evenly distributed between the maximum and minimum. The amounts in each class were arranged in order, beginning with the lowest and increasing toward the highest. In this series the fourteenth figure represents the largest amount spent by one-fourth the class. In a similar way, the highest expenditures for one-half and for three-fourths of the class were secured. From these figures it appears that, while there were great variations between the lowest and the highest amount, the expenditures of a large number of students were close to the average.

Summary of Expenses of Junior and Senior Women at the University of Illinois from February 15 to May 15, 1915

	CLOTHING	LAUNDRY AND CLEANING	BOARD	RENT	UNIVERSITY ACTIVITIES	UNIVERSITY EXPENSES	RECREATION	MISCELLANEOUS	TOTAL
Average.....	$46.60	$7.45	$59.92	$28.69	$8.64	$18.92	$7.25	$15.12	$181.77
Maximum.....	116.70	25.00	95.00	44.00	26.60	42.10	25.00	91.50	426.00
Minimum.....	4.53	.94	25.00	9.00	.50	.70	.75	4.55	92.15
For items indicated ¼ of the students spent less than.....	29.30	4.20	50.95	24.00	3.50	10.10	3.09	8.30	150.00
½ of the students spent less than..	42.15	6.00	58.50	30.00	7.10	15.45	5.25	11.95	176.84
¾ of the students spent less than..	62.98	11.00	65.00	32.00	13.42	23.13	9.96	19.51	209.43

The column showing the cost of clothing is probably the least valuable because of the short time during which the accounts were kept. Clothing expenditures are not distributed evenly over the year, nor even over several years. Consequently, while the figures are interesting as a record of what fifty-three students actually spent on clothes during these three months, they cannot be relied upon to show what clothing might be expected to cost during that period. In this connection it is interesting to note that a questionnaire sent out by the Dean of Women indicates $173 as the average yearly cost of clothing. The cost of laundry was lowered by the fact that many students sent their clothes home to be washed, and counted only the parcel post rate as the cost of laundry. A few did their own washing. One of them reported an expenditure of $0.94 as the cost of soap, starch, bluing and the rent of an electric iron. The amount spent for board presents wide variations, especially since so large a number paid about $60. The minimum cost

of board, $25 was that of a student who paid part of her bill in work, and who consequently did not represent the full food cost in her report. An expenditure of $26.60, however, is reported by another student who, with several others, did light housekeeping, and who it might be added was a senior and an honor student. Rent, like food, presents a fairly uniform cost to a large number of students. The highest and lowest expenditures for rent belong to the same students as those for food. The expenditures for university interests, recreation, and miscellaneous items, as well as that for clothing, show the influence of the amount of money the student has to spend. The lowest total expenditure, $92.15, was due to the fact that the student acted as commissary in her sorority and did not pay board, although a total expenditure of $101 was reported by two girls who paid in money for everything.

Of all the expenditures, those for board, rent, and laundry seem most likely to furnish a basis upon which to estimate a year's expenses. The others are too much influenced by the short period to be of any great value. For a large number of students, board may be expected to cost $20 a month, or $4.50 a week; rent $10 a month, usually with a roommate; laundry $0.50 a week, but only on condition that the student does a part of it herself or sends it home. If any conclusion can be drawn from the total expenditures, the most usual amount, exclusive of tuition, for a junior or senior woman at the University of Illinois is $60 a month, or a little over $500 a year.

HONEY AND ITS USES IN THE HOME

The U. S. Department of Agriculture has recently published a bulletin[1] on honey and its uses, and some of the things it tells about are here brought to the housekeeper's attention.

In this country honey has hitherto not been in as common use as in Europe, especially in cookery. It is, however, a comparatively simple matter to substitute it in many recipes for common sugar or for molasses, and the resulting flavor is often both novel and agreeable.

[1] Honey and its Uses in the Home. By Caroline L. Hunt and Helen W. Atwater, U. S. Dept. Agr., Farmers' Bul. 653. The Department of Agriculture will send this to anyone free upon request.

Honey is marketed in two forms, known respectively as comb honey and extracted honey. In the past there has been some prejudice against extracted honey—or honey removed from the comb—because it was believed that this was frequently adulterated. However prevalent this practice may have been in the past, recent legislation and the efforts of honey producers themselves have made it dangerous and unprofitable. There is now, it is believed, little adulterated extracted honey on the market. Comb honey is practically certain to be the pure product of the hive, because it can only be adulterated by processes which cost more than they save. When sold at retail there is now comparatively little difference in the cost of comb and extracted honey, but the latter can be purchased at wholesale very much more cheaply. The reason for this is that the producer of comb honey makes a product which is practically ready to be delivered to the consumer. Moreover, it costs the bee-keeper less to produce extracted honey while the wholesaler who purchases extracted honey must carry through several processes before he can sell it at retail. If the housewife is willing to do these herself, she can effect a considerable saving.

The fact that honey consists principally of sugar and water and is slightly acid suggests that it is a suitable substitute for molasses in cookery. As a matter of fact, it can be used in the place of molasses in all forms of breads, muffins, and cakes, and makes a more delicately flavored product. It contains less acid than molasses, however, and so requires less soda when it is substituted for molasses in recipes which do not include sour milk or other acid, and the cook must be careful about the amount of soda used. Many trials were made with different kinds of honey in the nutrition laboratory of the U. S. Department of Agriculture which showed that the allowance of soda to a cupful of honey very generally ranges between one-fourth and one-half of a level teaspoonful. Unless the cook is thoroughly familiar with her honey, she would do well to mix and bake a small sample of dough before she decides on the amount of soda to use.

One of the great advantages in the use of honey is that cakes made with it will keep much longer than those made with sugar. A honey cake made with butter, for instance, will keep its quality until the butter grows rancid, and one made without butter will keep fresh for months. For this reason honey is especially useful in recipes that call for no butter. Icing made with honey has the same advantage, and some icing made in the experimental laboratory of the Department of

Agriculture was found at the end of 10 months to be as soft and in as good condition as when it was first made. A little experience will enable any competent cook to substitute honey successfully for sugar in bread, cake, preserved fruits, sauces, and candies. It is safe to estimate that a cupful of honey will sweeten a dish about as much as a cupful of sugar, but since honey contains water in addition, there is need for less milk or other liquids. For practical purposes it is accurate enough to consider that for each cupful of honey a quarter of a cupful of liquid is added to the recipe. If these facts are kept in mind special honey recipes are unnecessary; yet it is convenient to have some that have been tested and adapted to household use.

The following are selected from a number of such recipes:

HONEY AND NUT BRAN MUFFINS

½ cup honey
1 cup flour
From ¼ to ½ teaspoon soda
¼ teaspoon salt
2 cups bran
1 tablespoon melted butter
1½ cups milk
¾ cup finely chopped English walnuts

Sift together the flour, soda, and salt, and mix them with the bran. Add the other ingredients and bake for 25 or 30 minutes in a hot oven in gem tins. This will make about 20 muffins.

SOFT HONEY CAKE

½ cup butter
1 cup honey
1 egg
½ cup sour milk
1 teaspoon soda
½ teaspoon cinnamon
½ teaspoon ginger
4 cups flour

Rub the butter and honey together; add the egg well beaten, the milk and the flour sifted with soda and spices. Bake in a shallow pan.

NUT HONEY CAKE

2 cups brown sugar
2 cups honey
6 egg yolks
3 cups flour
Speck of salt
1½ teaspoons soda
3 teaspoons ground cinnamon
½ teaspoon ground cloves
½ teaspoon ground nutmeg
½ teaspoon allspice
1 cup chopped raisins
½ ounce citron cut in small pieces
½ ounce candied orange peel cut in small pieces
½ pound almonds coarsely chopped
Whites of 3 eggs

Mix the sugar, honey, and the yolks of the eggs, and beat thoroughly. Sift together the flour, salt, spices, and soda. Combine all ingredients but the whites of the eggs. Beat the whites of the eggs till they are stiff and add them last. Pour the dough to the depth of about half an inch into well-buttered tins, and bake in a slow oven for one-half hour.

HARD HONEY CAKE

¾ cup honey
½ cup sugar
2½ cups flour
1 egg
¼ teaspoon ginger
1 teaspoon cinnamon
½ teaspoon ground cardamom seed
½ teaspoon cloves
Speck white pepper
Speck salt
½ teaspoon soda
1 tablespoon water
2 ounces blanched almonds cut into small pieces or chopped

Sift together the flour and spices, dissolve the soda in the water, beat the egg and combine all the ingredients. Beat or knead the mixture thoroughly. Cook a small sample. If it does not rise sufficiently, add a little more soda and honey; if it falls, add a little more flour. Roll out the dough to the thickness of about three-fourths of an inch and bake in a hot oven. When the cake is done glaze it with a thick sirup of sugar and water and allow it to dry in a slow oven or in some other warm place. While it is still warm, cut it into long strips, or it may be left in one large cake, to be cut into thin slices when served. This cake will become very hard on cooling and will not be soft enough to eat for several weeks, but will keep in good condition for an indefinite length of time.

HONEY CHARLOTTE RUSSE

1 quart cream
6 lady fingers
½ cup delicately flavored honey

Chill the honey by placing the dish containing it in a pan of ice water. Whip the cream and add it to the honey, mixing the two well. Line a dish with lady fingers and fill it with the honey and cream. Serve very cold.

CURRANTS

Bar-le-Duc currants, an article of commerce that sells for a relatively high price, in part no doubt because of the large amount of labor involved in preparing them, are often made with honey.

CANDIED CRANBERRIES

Candied cranberries make a delicious and inexpensive confection, much resembling candied cherries but having a distinct flavor of their own. This is a suggestion to housewives from the Home Economics experts of the U. S. Department of Agriculture, who have been developing new uses for the cranberry. They have developed a method which if followed closely gives a bright, firm, plump, semitransparent candied fruit which can be eaten as a sweetmeat or used to give a touch of color to frosted cakes, whipped cream, or custards, or which can be used like citron in cakes or puddings or chopped up and added to "tutti-frutti" ice creams.

The secret of candying cranberries lies in handling the fruit so that it will become saturated with sugar. This calls for slow cooking on the instalment plan and the use of a dish large enough to permit all the berries to float at the top of the sirup during cooking. The skins are so tough that they must be pierced before cooking to let the sirup into the pulp or interior. To do this, three little slits, each one-eighth inch long, should be made in each berry with the point of a penknife. Use selected large, firm cranberries. The directions for cooking are as follows:

For 1½ cups of berries, make a thin sirup by boiling together until clear 2 cups of sugar and 2½ cups of water. When the sirup is cool, add the berries and bring very slowly to the boiling point. If the berries are heated too quickly, the skins will burst before the sirup soaks into the pulp. As soon as the sirup boils, take the dish off the stove and let it stand over night. Next day, drain the sirup from the berries and boil it until it is reduced to about half its original volume. Put the berries into this medium-thick sirup and heat slowly; boil gently for 3 or 4 minutes, and then allow to stand for 2 hours or more. Then boil gently a third time for 5 minutes. A smaller dish probably will be needed for the third and last boiling. When thoroughly cold, or better still, on the following day, drain off the sirup and spread the berries out on a lightly buttered plate or a sheet of clean, waxed or lightly buttered paper until the surface of the berries dries.

The berries, if directions have been followed, will candy separately, and not into a sticky mass.

To make a delicious ice cream, add ½ to ¾ of a cup of chopped berries to each quart of the cream mixture. They also can be combined with bits of candied orange or lemon peel, or other glacé fruits to make

"tutti-frutti" ice cream. The sirup left over after the berries are candied has a pleasant sweet-acid flavor and fine color and is excellent in pudding sauce or even, when diluted with water, for use on pancakes, and waffles.

GOOD HEALTH COMMERCIALLY CONSIDERED

The final report of the Commission on Industrial Relations, just issued, as reported in the *Journal of the American Medical Association*, states that each of the thirty-odd million wage earners in the United States loses an average of nine days a year through sickness, at an average cost of two dollars a day. The wage loss from this source is over five hundred million, while the added cost of medical care of at least $180,000,000 increases the total sick bill of the wage earners of the United States to $680,000,000 a year. From 30 to 40 per cent of cases requiring charitable relief are due to sickness, while sickness among wage earners is primarily the result of poverty, causing insufficient diet, bad housing, inadequate clothing and unfavorable surroundings in the home. According to the commission, the surroundings and place of work and the personal habits of the worker are important but secondary factors. This means that while there should be no diminution in our efforts to secure better conditions in the factory, the office and the workshop, the real solution of the public health problem lies in the improvement of the home.

"BABY WEEK"

The Children's Bureau of the U. S. Department of Labor wishes everyone to remember that 1916 is Baby Year. The facts about American babies, the needs of American babies, and America's responsibility to her babies will this year be known as never before, because the first week in March will be Baby Week throughout the country.

The Children's Bureau points out that more than four hundred communities representing every State in the Union are already laying their plans for Baby Week, in order that during those seven days the needs of the babies may be so presented that all the parents in those communities will learn a little better how to care for their babies, and all the citizens will realize that they have a special obligation to safeguard the conditions surrounding babies. It is confidently believed by those who are interested in this nation-wide Baby Week that the remainder of the year will be marked by a strengthening of all community activities for saving babies' lives and giving them a better chance to grow to a healthy maturity.

The Baby Week idea originated in Chicago not quite two years ago; then New York had a Baby Week, and Pittsburgh, and other cities. Such practical benefit has in each case resulted that the General Federation of Women's Clubs has undertaken to promote this nation-wide observance. State health officials and national organizations interested in public health and child welfare have taken up the plan and in various ways are giving it not only their sanction but their active coöperation. The extension divisions of the state universities have promised special assistance in interesting rural communities and helping them to observe Baby Week.

The Federal Children's Bureau believes that Baby Week will give more parents a chance to learn the accepted principles of infant care, and will awaken every American to his responsibility for the deaths of the three hundred thousand babies who, according to the census estimates, die every year before they are twelve months old. Therefore the Children's Bureau has prepared a special bulletin[1] of practical suggestions for Baby Week campaigns, adapted to the varying needs of communities of different types. Copies of this bulletin may be had free of charge from the Children's Bureau at Washington.

[1] Baby-Week Campaigns—Suggestions for committees of various size. (1915) Dept. of Labor, Children's Bureau, Miscellaneous Series 5, Bur. Pub. 15.

EDITORIALS

The Smoot Bill for Research in Home Economics (Senate Bill 280 of the Congress now in session). Those who are familiar with the Smith-Lever Act will remember that while Home Economics is mentioned as one of the subjects that is to receive attention from its funds there is no definite division of money, and no specification in regard to the amount that must be spent in work for the home as distinct from that devoted to agriculture. It is probable that in some states it will be difficult for Home Economics to obtain a fair share of the appropriations.

It is therefore with special interest that those in this movement look toward a bill dealing with appropriations for Experiment Stations to be devoted exclusively to experiments in Home Economics.

This bill was introduced by Senator Smoot of Utah, April 7, 1913. It was referred to the Senate Committee on Agriculture and Forestry and was still pending before that Committee at the dissolution of Congress. It is to be introduced again by Senator Smoot at the present session.

The bill proposes to supplement the Federal appropriations for experiment stations (Hatch and Adams Acts) by granting to each state $10,000 per annum "to be applied only to paying the necessary expenses of conducting original or confirmatory researches or experiments bearing directly on Home Economics, including both domestic science and domestic art, and printing and disseminating the results of said researches or experiments, having due regard to the varying conditions and needs of the respective states and territories."

Under the proposed bill bulletins or reports of progress on the results of the work must be issued at least once in six months; these to be sent to newspapers and individuals under the franking privilege.

The remaining administrative details of the bill as to handling of funds, accounting, etc., correspond closely to those now prescribed under the Hatch and Adams Acts.

Effort should be made not only by organizations but by teachers of Home Economics, by housekeepers, by institution managers, and by social workers who are dealing directly with home problems, to bring to bear all legitimate influence for the passage of the bill.

Marketing by Telephone. Prof. T. N. Carver of Harvard in his review of "Lower Living Costs in Cities" by Clyde Lyndon King, in the July number of the *Municipal Review*, calls attention to "the enormous use which is made of the telephone in marketing." He says:

> Any comparison between American and European cities which fails to take into account the fact that two-thirds of all the telephones in the world are in the United States and three-fourths of all of them in the United States and Canada is an incomplete comparison. It is easy to point out that much could be saved in the cost of food through the use of central municipal markets, but until the American housewives give up the telephone habit they are not going in large numbers to the central municipal market or any kind of a market that does not offer prompt or immediate delivery.
>
> The author states "The American city still thinks corner-grocery-wise of its food supply" but it is not conclusively shown that there is any cheaper method of giving the American housewife the kind of service she demands than the corner grocery method. In fact there is much to be said in favor of the proposition that the cheapest method of rendering good service is to have a large number of small depots widely distributed to which food supplies may be sent in large lots, say by the truck-load, and from which they can be promptly distributed to the households in small or retail packages. It looks as though the problem of economic distribution of food products would have to be solved with the telephone as a factor rather than without it. If this be true, the corner grocery may serve as the depot from which the housewife may secure at a minimum cost prompt delivery of food in small packages. Instead therefore of relegating the corner grocery to a past century, a fuller knowledge of the situation may convince us that the centralized retail market belongs to a backward civilization antedating the wide use of the telephone, a state of affairs under which the housewife went to market with her basket and carried her purchases home. This may have been a means of saving money, but it was very wasteful of human energy. With the advance in civilization the tendency is more and more to save human energy even though we spend a little more in doing so. The energy which is saved may earn more than enough to pay for the extra money cost.

We have quoted in full because it is seldom that this side of the matter is so fully presented. We are told over and over again that one of the reasons for the high cost of living is "marketing by telephone." Often no distinction is made between the classes of goods that may be successfully bought in this way, and those that are difficult to obtain satisfactorily. Sugar, flour, canned goods, package goods, when one knows the brand, and many other standard articles may be bought as

well in this way as in any other. Meat, fresh fruits and vegetables are usually purchased more satisfactorily by personal inspection. It is easier, too, by going to market to take advantage of variations in market prices. Yet even here distinction must be made. The woman who deals with one clerk who will keep her informed of such variations, who knows the quality of food that she wishes and who is interested to serve her satisfactorily, may perhaps use the telephone without disadvantage.

One woman said that it cost her more to go to market herself for she constantly saw tempting materials that she wanted to buy though to her purse they represented luxuries. She carefully made out each week a list of her needs and ordered them by card or by telephone and confined her purchases to articles that she could afford.

However this may be, it seems foolish to make sweeping statements that for the very lack of differentiation carry no weight. Marketing by telephone is here and it has undoubtedly come to stay. Let us try to regulate it, not condemn it.

ANNOUNCEMENT

The American Home Economics Association will hold a meeting at Detroit, Michigan, on Friday, February 25, in connection with the meeting of the Department of Superintendence of the National Education Association.

In the morning there will be a joint session of Home Economics and Agriculture with addresses related to high and secondary school work. The afternoon session will include subjects of interest to college teachers and to officers of administration. One of the topics discussed will be that of "terminology."

Professor Marlatt of the University of Wisconsin; Professor Berry of the University of Minnesota; President Ednah Rich of Santa Barbara, Cal.; Professor Bevier of the University of Illinois; Professor Kinne of Teachers College, New York, and Professor Works of Cornell University, are expected to address the meetings.

BOOKS AND LITERATURE

Any book or periodical mentioned in this department may be obtained through the JOURNAL OF HOME ECONOMICS if the Journal price is listed.

Electric Cooking, Heating and Cleaning. By MAUD LANCASTER. An American edition of an English book revised by Stephen L. Coles. New York: D. Van Nostrand Company, 1914, pp. 329. $1.50. By mail of the JOURNAL $1.64

Purporting to be a "Manual of electricity in the service of the home" this book lacks both organization of material and brevity of language to fulfill its purpose. In places it moves along in a decidedly chatty style and then becomes quite technical in tone. It is profusely illustrated, principally with English designs of electrical household appliances while few appliances now shown by American manufacturers are presented. The laundry equipment is most meager yet this is the place where the aid of electricity has been most welcomed in the household. The American line of household dishwashers, which lighten another tedious household task is not even touched.

In the chapter on electric heating of water, the cost and comparative heating efficiency of coal, gas and electricity are given. All costs for cooking and heating are based on the low English rate of 1d. or 2 cents per unit—1000 watts—while rates in the United States range from 3 to 20 cents per unit. A 10 cent rate is quite common in our cities. This makes all cost tables appear much lower than they would actually be here.

Perhaps the most valuable chapter of the book for our use is the listing of current rates of a large number of the cities and towns of the United States. This rate together with a knowledge of the gas rate for that city would enable one to decide whether to equip a laboratory with gas or electricity, for there are many places where electricity would give the lower running cost.

Chemistry and its Relations to Daily Life. By LOUIS KAHLENBERG and EDWIN B. HART. New York: The Macmillan Company, 1914, pp. 393. $1.25. By mail of the JOURNAL, $1.39.

This volume is a textbook intended for students of agriculture and Home Economics in the secondary schools. About half of the book is devoted to the presentation of the principles of inorganic chemistry in a very elementary form. Applications to problems of daily life are given most successfully in close relation to the theoretical discussion, wherever the relation between theory and practice can be simply presented.

The treatment of more difficult practical matters to which the second half of the volume is devoted is less successful. Ten chapters devoted to inorganic chemistry and one devoted to organic chemistry do not serve as an adequate background for the discussion of such complex subjects as varnishes, textiles, rubber, soils, plant physiology, and plant and human nutrition. The treatment is necessarily empirical and encyclopedic rather than scientific. The volume is profusely illustrated with cuts which aim to emphasize practical applications—a home-made lime kiln, a field of sugar beets, a field of sugar cane, cooking utensils made of aluminum, thermite welding, and many others.

The Organic Flavoring Compounds. By C. COHN (*Die Organischen Geschmacksstoffe*). Berlin: Franz Siemenroth, 1914, pp. xi + 936.

This book is an extended treatise on the organic chemistry of the flavoring compounds. The first part of the volume is composed largely of a general classification. A discussion is given of the influence of chemical composition and constitution upon the degree and kind of taste. The physiology of taste is also considered somewhat at length. Detailed information is given regarding the more important synthetic sweet flavors, such as saccharin, dulcin, and glucin.

Roman Cooks. By. CORNELIA G. HARCUM (*Dissertation, Johns Hopkins Univ.*, 1913. *pp.* 84). $0.50. By mail of the JOURNAL, $0.55.

Much interesting information is given regarding cooks and cooking during the early history of Rome. A bibliography is appended. Such publications are valuable in connection with the historical and cultural side of Home Economics.

Mary at the Farm and Book of Recipes Compiled During Her Visit Among the "Pennsylvania Germans." By EDITH M. THOMAS. Norristown, Pa.: John Hartenstine, 1915, pp. 440, pls. 20, figs. 30. Strawbridge and Clothier, Philadelphia, $2.25. By mail of the JOURNAL, $2.45.

It is not often that a book comes to hand which shows a clearer and more "common sensible" understanding of the philosophy of housekeeping than does this volume. Although set in a very slender frame of fiction, it contains much valuable historical information regarding the handicrafts and the culinary art practiced by the people of German stock in the southeastern part of Pennsylvania. Some of the illustrations represent typical people and scenery of that neighborhood, but many of them are reproductions of interesting household furnishings such as home-made rugs of various types, old Pennsylvania pottery, types of lamps and lanterns, and other things. The recipes are typical of the dishes (many of them very "tasty"), beloved in that region and are neither too extravagant nor too "skimpy" for general use.

A Text-Book of Cooking. By CARLOTTA C. GREER. New York: Allyn and Bacon, 1915, pp. 431. $1.25. By mail of the JOURNAL, $1.37.

As one glances at the table of contents of this book, one is impressed with the fact that much thought and care has been expended in careful'y outlining the work. For example, the division of foods is a somewhat unusual one, and the author has avoided the mistake sometimes made of giving the impression to immature students that protein builds tissue only and carbohydrates and fats only yield energy. The name given to the division on the mineral constituent of foods is unusual, too, and yet in accordance with our present knowledge of the functions of minerals.

The aims, as given in the preface, are "To lay the foundation for skill in cooking by directing the pupil to follow established recipes and to treat processes of cooking as experiments in a scientific study." This is a desirable attitude of mind to cultivate, even if there is some question as to whether skill in cooking is the most important aim for high school work. The preface further states that "An adaptation of the 'Meal Method' is used both for the purpose of reviewing processes of cooking and also for gaining skill and speed in the preparation of several foods at the same time." The plan is not always well carried out. There is some question, for example, whether the menu given on page 58, "Boiled rice with tomato or cheese sauce, chocolate cornstarch pudding," is really a meal; and whether these two dishes should be served together. Again it is not at all clear why the meal, in the midst of fats, should be corn soup, baked potato, and fruit tapioca.

The statement on page iv that "Subjects follow the logical order except where some other order is required because of the perish-

able or reasonable nature of foods" raises the question as to what is the logical order. For example, if, as the author says, "In the first portion of Part I special emphasis is placed upon the uses of foods in the body," why is it not logical to begin with "Body-building Foods," Division Four? Milk and eggs have the advantage of being familiar forms of food and just as seasonable and even cheaper in September and October than later in the year; while an examination of the fruits actually used shows that they are rhubarb, apples, bananas, apricots, and prunes, available, with the possible exception of rhubarb, in almost any season. Or, taking the author's own method, if she prefers to begin the actual preparation of food with fruit, why not relieve the "prosaic directions for dish-washing" by having a chart showing the large proportion of water in fresh fruits and vegetables and cook the dried fruits as given in Lesson 6, rather than introduce the more difficult processes of broiling tomatoes and baking squash. The uses of water would be better illustrated by the former method and the connection more direct than by the introduction of two unrelated cooking processes. Since there are many uses of water besides dish-washing, as the author shows so clearly in Division Six, why not teach them in this connection and so enable the student to regard water as something other than a cleansing agent?

Notwithstanding these criticisms, Part I contains much excellent material, and in the hands of a wise teacher, will be useful.

In Part II, the author has brought together a large amount of information on points that are of general interest to every home keeper and which ought to constitute a part of the training of every young person. The chapters on "The Lunch Box," "The Sick-room Tray," and "Dining-room Service" are excellent.

Doubtless, there is much more work than many high schools can use, but the book will be a valuable reference book in any home, and many mothers will welcome the suggestions on food requirement and diet for children.

Institutional Supplies. Baltimore, Md. Bureau of State and Municipal Research, 1913, report No. 5.

Part one is a general discussion of institutional buying followed by notes for the use of the purchasing officials and some standardized specifications. Two methods of buying are compared: first, buying by competitive bids submitted by dealers on specifications; second, buying through experts. The first is valuable because it stimulates competition, gives an open market, makes standardization necessary, and is notably valuable if the exception is made in case of special bargains. If the buying is done for a number of institutions an expert is able to obtain better prices and better quality of goods than is possible by competitive buying. The salary of such an expert, however, makes that method somewhat expensive.

In order to buy to the best advantage it is necessary to standardize all purchases; that is, to make a study of the quality of goods, the proper unit for economy, the amount consumed, and the special features of each article. The price will also be affected by the time of purchase, length of contract, numbers of and time of delivery. In planning specifications it is necessary to make a careful estimate of needs, and a careful designation of quality. The sample buying is often more satisfactory because it is the surest form of standardization. No contract should be made without allowing for the right to reject bids or to accept in part.

Even when goods are bought by contract arrangements should be made by which emergencies may be met and an opportunity given to avail the institution of certain advantageous bargains. Coöperative buying for many institutions through a staff of experts would be, perhaps, the most inexpensive and most satisfactory method of purchasing.

BOOKS RECEIVED

A-B-C of Housekeeping. By Christine Herrick. New York: Harper and Brothers, 1915 pp. 122. $0.50.

America's Gifts to the Old World: A Pageant or Masque for Home Economics Students. By Helen W. Atwater and C. F. Langworthy. Baltimore: The American Home Economics Association, 1915, pp. vii + 20. $0.50, 5 or more copies $0.35 each.

American Women in Civic Work. By Helen Christine Bennett. New York: Dodd, Mead and Company, 1915, pp. 277. $1.25. By mail of the Journal, $1.36.

Eugenics. By Edgar Schuster. Baltimore: Warwick and York, 1912, pp. 264. $0.40. By mail of the Journal, $0.45.

Food. What It Is and Does. By Edith Greer. New York: Ginn and Company, 1915, pp. 251. $1.00. By mail of the Journal, $1.08.

Good Taste in Home Furnishing. By Maud Ann Sell and Henry Blackman Sell. New York: John Lane and Company, 1915, pp. 140. $1.25. By mail of the Journal, $1.33.

The High Cost of Living. By G. H. Gerber. New York: The N. Y. Book Company, 1915, pp. 150. $0.50. By mail of the Journal, $0.55.

Home-made Toys for Girls and Boys. By A. Neely Hall. Boston: Lothrop, Lee and Shepard Company, 1915, pp. 218. $1.25.

Inside the House of Good Taste. By Richardson Wright. New York: McBride, Nast and Company, 1915, pp. 155. $1.50. By mail of the Journal, $1.64.

Lower Living Costs in Cities. By Clyde Lyndon King. New York: D. Appleton and Company, 1915, pp. 355. $1.50. By mail of the Journal, $1.60.

Principles of Correct Dress. By Florence Hull Winterburn (including chapters by Jean Worth and Paul Poiret). New York: Harper and Brothers, 1914, pp. 245. $1.00. By mail of the Journal, $1.06.

Schools of To-Morrow. By John Dewey and Evelyn Dewey. New York: E. P. Dutton and Company, 1915, pp. 316. $1.50. By mail of the Journal, $1.61.

PAMPHLETS RECEIVED

An Outline on the History of Cookery. By Anna Barrows and Bertha E. Shapleigh, assisted by Anne D. Blitz. New York: Teachers College, Columbia Univ. Teachers College Bulletin, sixth series, no. 11 (1915). Technical Education Bulletin no. 28, pp. 36. $0.25.

Canning of Fruits and Vegetables. By Harriet J. Hopkins. Amherst, Mass.: The Massachusetts Agricultural College Extension Service, August 1915, pp. 15 (Mass. Bulletin for Farm Women no. 2).

Civic Education in Elementary Schools as Illustrated in Indianapolis. By Arthur W. Dunn. Washington, D. C.: Government Printing Office, 1915, pp. 35. $0.05. Supt. of Documents. (U. S. Bureau of Education Bulletin no. 17, whole number 642.)

Constructive Social Measures: A Review of Two Years Work. New York: N. Y. A. I. C. P., Department of Social Welfare, 1915, pp. 27.

Cooking in the Vocational School as Training for Home Making. By Iris P. O'Leary. Washington, D. C.: Government Printing Office, 1915, pp. 36. $0.05. Supt. of Documents. (U. S. Bureau of Education Bulletin no. 1, whole number 625.)

My Life with a Pat of Butter. By Lloyd Logan. Philadelphia: The Union Press, 1915, pp. 32. $0.25. By mail of the Journal, $0.27.

The Ten Peace Songs. By the Peace Song Committee. Chicago: Woman's Peace Party, 1915, pp. 39. $0.25. By mail of the Journal, $0.27.

BIBLIOGRAPHY OF HOME ECONOMICS

PERIODICAL LITERATURE

Foods and Cookery

Ice Cream Inspection. *Maine Sta. Off. Insp.*, 57 (1914), pp. 13–20.

Better Bread by Means of Natural Lactic Acid. A. Wahl, *Jour. Indus. and Engin. Chem.*, 7 (1915), no. 9, pp. 773–775.

Analysis and Cost of Ready-to-Serve Foods. G. Lusk, *Jour. Amer. Med. Assoc.*, 64 (1915), no. 21, pp. 1717–1723.

Edible Snails. E. W. Rust, *U. S. Dept. Agr. Yearbook*, (1914), pp. 491–503.

Determination of Fat in Ice Cream by the Babcock Method. C. A. A. Utt, *Jour. Indus. and Engin. Chem.*, 7 (1915), no. 9, p. 773.

Mineral and Organic Analyses of Foods; New Methods for the Determination of Sodium and Crude Fiber. E. B. Forbes, F. M. Beegle, and J. E. Mensching, *Ohio Sta. Bul.*, 255, pp. 211–216.

Experiments with Udo, the new Japanese Vegetable. D. Fairchild, *U. S. Dept. Agr. Bul.* 84 (1914), pp. 15, figs. 12.

Soluble Aluminum Compounds—Their Occurrence in Certain Vegetable Products. C. N. Myers, *Pub. Health Rpts.* [*U. S.*], 29 (1914), no. 25, pp. 1625–1629.

Points on Canning and Preserving, Jelly and Pickle Making. Janet McK. Hill, *Amer. Cookery*, 20 (1915–16), no. 1, pp. 50–52.

The Ideal Loaf of Bread. C. H. Briggs, *Northwest. Miller*, 101, (1915), no. 4, pp. 215, 216.

How Vermont Maple Sugar is Made. W. H. Crockett, *Bul. Vt. Dept. Agr.*, no. 21 (1915), pp. 48, pls. 2, figs. 16.

Composition of Corn (Maize) Meal Manufactured by Different Processes and the Influence of Composition on the Keeping Qualities. A. L. Winton, W. C. Burnet and J. H. Bornmann, *U. S. Dept. Agr. Bul.*, 215 (1915), pp. 31.

Methods Followed in the Commercial Canning of Foods. A. W. Bitting, *U. S. Dept. Agr. Bul.*, 196 (1915), pp. 79.

Nutrition

The Influence of Milk Feeding on Mortality and Growth, and on the Character of the Intestinal Flora. L. F. Rettger, *Jour. Expt. Med.*, 21 (1915), no. 4, pp. 365–388.

The Influence of Milk and Carbohydrate Feeding on the Bacteriology of the Intestine. L. F. Rettger and T. G. Hull, *Science*, 42 (1915), no. 1080, p. 352.

The Bacteria of the Intestinal Tract of Man. A. J. Kendall, *Science*, 42 (1915), no. 1076, pp. 209–212; no. 1080, pp. 359, 360.

Experiences with the High Calorie Diet in Typhoid Fever of Infants and Young Children. L. E. LaFétra and L. G. Schroeder, *Amer. Jour. Diseases Children*, 9 (1915), no. 5, pp. 387–405.

The Blood and the Specific Secretory Products of the Organs of Internal Secretion. J. J. Abel, *Science*, 42 (1915), 1075, pp. 165–177.

Studies on the Theories of Diabetes, V. A Study of Narcotic Drugs in Phlorizin Diabetes. W. D. Sansum and R. T. Woodyatt, *Jour. Biol. Chem.*, 21 (1915), no. 1, pp. 1–21.

The Metabolism of White Races Living in the Tropics. I. Protein Metabolism. W. J. Young, *Ann. Trop. Med. and Par.*, 9 (1915), no. 1, pp. 91–108.

Energy Requirement of the New Born. H. C. Bailey and J. R. Murlin, *Proc. Soc. Expt. Biol. and Med.*, 11 (1914) no. 4, pp. 109–111.

The Influence of the Total Fuel Value of a Dietary upon the Quantity of Vitamin Required to Prevent Beri-beri. W. L. Braddon and E. A. Cooper, *Brit. Med. Jour.*, no. 2790 (1914), pp. 1348, 1349. cf. also pp. 1373, 1374.

The Resistance of Pure Proteins to Bacterial Decomposition. Editorial, *Jour. Amer. Med. Assoc.*, 65 (1915), no. 3, p. 257.

Cottonseed Meal for Feeding Beef Cattle. W. F. Ward, *U. S. Dept. Agr.*, Farmers' Bul. 655 (1915), pp. 8.

Hygiene and Sanitation

Some Results of the First Year's Work of the New York State Commission on Ventilation. C. E. A. Winslow, et. al., *Amer. Jour. Pub. Health*, 5 (1915), no. 2, pp. 85–118, figs. 9.

Standards of Ventilation in the Light of Recent Research. C. E. A. Winslow, *Science*, 41 (1915), no. 1061, pp. 625–632.

Clean Water and How to Get It on the Farm. R. W. Trullinger, *U. S. Dept. Agr. Yearbook* (1914), pp. 139–156, pls. 3, figs. 3.

Pasteurizing Milk in Bottles and Bottling Hot Milk Pasteurized in Bulk. S. H. Ayers and W. T. Johnson, Jr. *U. S. Dept. Agr. Bul.*, 240 (1915), pp. 27, figs. 10.

The Cost of Pasteurizing Milk and Cream. J. T. Bowen, *U. S. Dept. Agr. Bul.*, 85 (1914), pp. 12, fig. 1.

Exercise and Health. F. C. Smith, *Pub. Health Rpts.* [*U. S.*] *Suppl.* 24 (1915), pp. 7.

Ability of the Colon Bacillus to Survive Pasteurization. S. H. Ayers and W. Johnson, Jr., *Jour. Agr. Research*, 3 (1915), no. 5, pp. 401–410, fig. 1.

Pasteurization of Milk and the Colon Bacillus. Editorial, *Jour. Amer. Med. Assoc.*, 64 (1915), no. 21, pp. 1767, 1768.

Newer Charges Against the Insects. Editorial, *Jour. Amer. Med. Assoc.*, 64 (1915), no. 20, p. 1662.

Miscellaneous

The revival of the Use of Natural Dye-Stuffs. E. S. Chapin, *Jour. Indus. and Engin. Chem.*, 7 (1915), no. 7, pp. 625–628.

The Selection of Household Equipment. Helen W. Atwater, *U. S. Dept. Agr. Yearbook* (1914), pp. 339–362, pls. 4, fig. 1.

The Carpet Beetle or "Buffalo Moth." L. O. Howard, *U. S. Dept. Agr., Farmers' Bul.* 626 (1914), pp. 4, fig. 1.

The House Centipede. C. L. Marlatt, *U. S. Dept. Agr., Farmers' Bul.* 627 (1914), pp. 4, figs. 2.

Measurements for the Household. *U. S. Dept. Commerce, Bur. Standards* Circ. 55 (1915), pp. 149, figs. 62. (Gives information as to units, methods, and instruments of measurement of commodities, heat, light, electricity, gas, water, humidity, density, etc. Is of interest and value to housekeepers and teachers of Home Economics.)

NEWS FROM THE FIELD

The Ohio Chapter of the Home Economics Association held its sixth annual meeting at Toledo, Ohio, in conjunction with the Northwestern Ohio Teachers' Association.

The morning was spent in visiting schools. The afternoon session was held at Scott High School. There were four speakers on the program—Prof. A. W. Trettien of Toledo University, spoke on Some Neglected Factors in the Training of Girls. He touched on various phases of their physical mental and moral development, especially emphasizing the fact that only in a strong, healthy body could we hope to have a sane mind.

Miss F. M. La Ganke, Western Reserve University, discussed the value of "contact points." Her plea was for a more liberal education, an ability on the instructor's part to correlate the work in her classes in household administration with the community housekeeping.

The complaints of mothers that their daughters do not learn to cook economically, that they waste time and use too many dishes were discussed by Miss M. Chapin in her paper on How Can We Make Our Instruction in Home Economics More Effective?

An illustrated talk on the Adulteration of Food was given by Dr. Wm. Reed of Toledo University. He showed milk and bake shop goods on sale "before and after" the inspection by the city authorities.

An inspection of the Household Administration rooms at Scott High School followed the meeting. The simplicity, the good taste, and the attention to detail in all the furnishings and equipment were especially noticeable. Tea was served in the refectory of the school by the Toledo Teachers' Association.

Texas Home Economics Association.—The third annual meeting of the Texas State Home Economics Association was held on November 26, 1915, in Corpus Christi, in connection with the Texas State Teachers' Association.

The meeting was presided over by Miss Emma E. Pirie, President, and was opened by her address to the Association.

The following program was then carried out: The Purpose and Work of the Home Economics Department of the Bureau of Education, Miss Carrie A. Lyford, Department Specialist in Home Economics; Science in the High School, Dr. E. P Schoch, University of Texas, Austin; The Home Economics Teacher and the Public Health, Miss Grace R. Berry, State Normal School, San Marcos, Texas; Discussion of the Texas Home Economics Syllabus, led by Miss Mary E. Gearing, University of Texas, Austin.

Ellen H. Richards' Day at Ohio State University.—Ellen H. Richards' Memorial Day was observed by the Home Economics Club on December 3 with a program which included an address, History of Home Economics at Ohio State University, by Dean Vivian; a brief statement concerning Mrs. Richards' work by Miss Edna White, head of the Home Economics department; and Personal Reminiscences concerning Mrs. Richards, by Miss Anna R. Van Meter. There was an attendance of about 200, and a generous beginning was made toward a contribution to the memorial fund. The Home Economics Club served luncheon to 150 guests upon this occasion.

The Pageant, America's Gifts.—The authors of the pageant, America's Gifts to the Old World, who presented it to The American Home Economics Association have recommended to the Council the following plan for its presentation.

Home Economics schools and clubs who present the pageant are expected to pay to the American Home Economics Association 20 per cent of the paid admission; or, if admission is free, $10 with the purchase of 15 or more copies, or $15 with less than 15 copies.

Schools and clubs not especially concerned with Home Economics will be expected to pay a royalty of $25 and 10 per cent of the gate receipts.

In the case of a small school or club a special arrangement may be made upon request.

In every case any money derived from the sale and use of the pageant goes to the Richards Memorial Fund for Home Economics.

For further information write to the American Home Economics Association, Station N, Baltimore, Md.

Two Phases of Extension Work.—The Home Economics Department at Ohio State University now has nine extension workers regularly in the field (and several others who go out occasionally), conducting courses in the county normals, and in the movable schools. The work of Farmers' Institute lecturers has recently been put under the direction of the department.

Miss Treva Kauffman has charge of the inauguration of a series of weekly lessons in several rural schools. Each lesson includes, together with other subject matter, the preparation of a dish which can be used for the children's luncheon, e.g., hot chocolate, cream and other soups, various potato, cereal, vegetable, fruit and egg dishes. A committee consisting of pupils and teacher attends each day to the preparing and serving of one of these hot dishes which the visiting teacher has demonstrated. This work has been taken up with great enthusiasm by the schools visited; needless to say, it has afforded the teacher excellent opportunities to teach sanitation, dietetics, higher standards of living, and various other things not explicitly laid down in the lessons as outlined.

Miss Jennie Tuttle, superintendent of the Columbus District Nurses' Association, has begun a series of extension lectures and demonstrations in home nursing and emergency work, visiting each of the various extension schools in turn.

Utah Extension Work.—Two Home Demonstrators are at work in the State. The projects in hand are home management and budgets for home use.

The keynote of the Housekeepers' Conferences for this year is health, how to obtain and conserve it. Speakers of note from outside the State will be present, at the conferences.

The girls' club work is beginning very auspiciously. The girls are showing much interest in the work outlined.

Extension Work, Iowa State College.—A correspondence course in Home Economics has been prepared for teachers of rural and grade schools. This is a course of 80 simple lessons so arranged that they can be easily applied in the schoolroom. No elaborate equipment will be necessary to carry out the work in the school, and only the practical phases of home work are included. The course begins with a few lessons on the principles of sanitation; then takes up briefly personal hygiene, and home management, and more fully, cooking and sewing. The subjects are treated so that a lesson prepared in the course is adaptable to the schoolroom with but little additional labor.

Enrollments may be made at any time. The lessons will be sent in the form of circulars containing an assignment of five lessons each. The fee is $2.

Philadelphia School Luncheons.—The school lunch under the management of Miss Emma Smedley has been extended this

year to three more high schools and twenty-five or more elementary schools. This action on the part of the school board is the result of investigation which found that 60 per cent of the school children started the day's work on wholly inadequate breakfasts, for example, one or more cups of coffee with a doughnut or bun, or a plate of cabbage with a slice of bread. Their luncheon pennies were spent for pretzels, pickles and candy.

For 15 cents the pupils in the high school can secure a substantial meal including soup, meat, dessert and cocoa or milk, and many find that 5 or 10 cents buys all they need. In the elementary schools the pupils may choose from a variety of penny dishes—hot creamed vegetables, soups, cocoa, milk, rolls, graham crackers, rice pudding, tapioca pudding, and stewed fruits. This is conducted on a paying basis.

In 1909 Miss Smedley, who had been a dietitian at Johns Hopkins Hospital, and a teacher of Domestic Science at Drexel Institute, took charge of the school lunch work in one of the high schools. The work has been extended until it includes ten high schools and annexes, and twenty-five elementary schools.

Lewis Institute, Chicago.—This year Lewis Institute has strengthened its four year curriculum. Courses in physiological chemistry, food analysis, geography of food, advanced work in dietetics, experimental cooking, technical cooking, and household management have been added for those who major in domestic science.

The domestic economy department at Lewis Institute plans to meet the needs of several groups of students. First, classes in cooking and sewing are offered to the high school girls in the Institute. Second, a two year college course, for those who are planning to teach in the grades, with instruction in both domestic science and domestic art. Third, a four year college course for those who are planning to teach. A student taking this course may major either in domestic science or domestic art; one-fourth of the required credits should be elected from the liberal arts courses. Fourth, a one year course in institutional management open only to students twenty-five years of age, or older. The evening school offers many of the courses listed above, and in addition courses in practical dietetics for nurses.

In order to offer practical experience in management and cooking, the classes in home cooking, cafeteria, tea room, and institutional management prepare and serve meals daily, each student in turn taking charge as hostess, manager, cook, or waitress. These are self-supporting as the guests pay a reasonable charge for the meal.

The Carnegie Celebration at Pittsburgh.—An invitation was extended to the JOURNAL OF HOME ECONOMICS to send a delegate to the celebration at Pittsburgh, on November 23 and 24, in honor of Mr. Carnegie's eightieth birthday and the twenty-fifth anniversary of the Carnegie Institute of Technology. The editor of the JOURNAL was able to accept the invitation and is happy to express her thanks for the cordial hospitality of the Institute. This included not only a luncheon at the Twentieth Century Club, given to the women guests by Dean Breed; a tea at the Margaret Morrison School, at which Miss Lyon, head of the Household Economic Department and other members of the faculty acted as hostesses; a dinner given in the splendid architectural hall; a pageant and a French play in which students were actors; but most interesting of all, the opportunity to inspect the wonderfully equipped buildings of the Institute and to see the students at work.

The interest of the Home Economics visitors centered in the Margaret Morrison School with its fine buildings and admirable facilities for work.

The courses offered in this school include: Household Economics, Secretarial Studies, Costume Economics, Home Arts and Crafts, Social Work, and General Science.

Pratt Institute. School of Household Science and Arts.—The new members of

the faculty are Miss Ada Gause and Miss Helen Sauer, instructors in trade dressmaking, and Miss Clara E. Youngs, assistant in cookery. Miss Gause is a graduate of Drexel Institute who brought to her normal training excellent trade experience. Last year she was supervisor of domestic arts in the schools of Houston, Texas. A series of articles by her on Domestic Art in the Grades is now being published in the Industrial Arts Magazine. Miss Sauer is a graduate of Mechanics Institute, Rochester, with two years' experience in teaching dressmaking.

Miss S. Ella Huntington, supervisor of millinery and teacher of trade classes, resigned December, 1915, after completing twenty-three years of service at Pratt. During all that time her fine personality, her trade experience and knowledge, her teaching ability and her deep interest in the work have been of inestimable value to generations of students. She is leaving the work to enter married life and carries with her the warmest good wishes of her colleagues.

The trade millinery of the winter term will be taught by Miss Ida Steele, who was trained by Miss Huntington and has since had excellent trade experience.

A series of demonstration lectures in cookery now forms a regular part of the Senior Normal Household Science schedule, each student being responsible for at least one demonstration during the fall or winter term.

Since these lectures are given mainly at settlements, where equipment is often limited and before audiences of varied nationality, there is unlimited opportunity for the development of initiative. Dishes prepared must be economical, wholesome and nutritious, and at the same time must meet the needs and tastes of the particular audience addressed, interesting the women to the point of trying out the recipe at home. The speaker must express herself in the simplest, most practical way, avoiding, or carefully explaining, technical terms.

The requests for special demonstrations that have been received from settlements and Mothers Clubs this season show how eagerly this type of instruction is welcomed by those who most need it. One recent request for a laundry demonstration opens up a new line of possibilities.

Connecticut College for Women has opened most auspiciously with what is believed to be a record freshman class—freshman in more than one sense—for they are not only freshman but the first class to enter the new college. There are 137 of them, 50 resident in the two college houses, 50 living in New London and its environs and 37 special or part time students who come only for one or two courses in which they are particularly interested. This last class contains many older women.

The college has at present five buildings, four of them built of rock quarried on the grounds, the fifth a temporary refectory and faculty house. The dormitories were built through the generosity of Mr. Morton F. Plant who gave $120,000 to build and furnish them. The administration and class room building which contains also the laboratories was built through the generosity of the people and corporation of New London, the former raising through personal subscription about $137,000 and the latter giving $50,000 from the city treasury. The endowment of the college, the magnificent sum of $1,000,000, was given altogether by Mr. Morton F. Plant.

The college grounds are 340 acres in extent, running along the historic Yale-Harvard course on the Thames River and back from the river about three-quarters of a mile, including a beautiful bit of forest, Bolleswood, the deed to which traces it back to the possession of Uncas. The Shore Line Electric passes the college grounds and gives easy communication with Norwich and the down town part of New London.

Connecticut College proposes to offer the regular courses leading to the B.A. and B.S. degrees and in addition to give such vocational courses as it can add from time to time. At present work is offered in library work, in domestic science (dietetics, design,

etc.), ceramics, photography, secretarial work, and physical education. It must be remembered, however, that freshman work only is offered this year, as it is the intention of the college to add to this each year until in three or four years complete work in these subjects will be available.

Especial attention has been given to the dietetic laboratory, which is up-to-date in every respect. Cabinet gas ranges are used, twenty in number, and with the range in unit groups are cabinets and sinks. A practice dining room, pantry, and store room belong with the laboratory and adjoining is another large room which is intended in time for the study of the chemistry of foods.

A Vocational Congress for High School Girls.—More than a hundred girls from all parts of Montana, representing high schools and county rural schools, gathered at the State College at Bozeman November 18 to 20, to attend the third annual vocational Conference held by the College in coöperation with the State Federation of Women's Clubs.

Each delegate on her return to her own school is expected to give an account of what she has seen and heard at the Congress and so to extend and multiply its usefulness. In one high school the representative was chosen as the result of an essay contest on the subject, Why I Wish to Attend the Vocational Congress.

President Hamilton in his welcome to the guests spoke of the economic independence of woman as the basis of her freedom and of her need of knowledge of possible opportunities if she is to choose a vocation rightly.

Many able and successful men and women, experts in their own lines addressed the conference, discussing the various kinds of paying work, other than teaching, now open to women.

Some of the occupations whose claims were discussed were presented under the topics, The Woman Agriculturist, Newspaper Work for Women, Women as Scientific Workers in State and Municipal Laboratories, Home Economics Extension, Training for Christian Social Service, Women in the Office, Costume Designing, Why I am a Police Woman, and Money-making for the Home Girl, while some of the more usual occupations such as nursing were treated from a new point of view; nor was Home Making as a profession omitted.

Mrs. Charlotte Perkins Gilman gave an address on Women and Work.

Three Eastern states, New Jersey, Tennessee and West Virginia, through club leaders, have expressed interest in this pioneer vocational congress have asked for full particulars about the Montana organization.

The School for Housekeepers at the University of Illinois.—The program of the school for Housekeepers held at the University of Illinois January 17 to 28 included not only food lectures and demonstrations, studied in form and color as applied to costume and problems in house furnishings, but also demonstrations of power machinery for household use, stereopticon lectures on landscape gardening and the flower garden, and on the plans and elevations for an Illinois country house; as well as many broad topics pertaining to the higher life of the home and the community.

The Fifteenth Meeting of the Central Association of Science and Mathematics Teachers was held on November 26 and 27 at the Carter Harrison Technical High School, Chicago. Two sessions were devoted to Home Economics, one of these in combination with the chemistry section. Some of the topics were: The Specific Contributions of General Chemistry to Home Economics, by Miss Nellie E. Goldthwaite; At What Point in the Home Economics Course Should Chemistry Be Made an Organic Part? by Miss Abby L. Marlatt; Dietaries in the High School, by Miss Minna Denton, and Miss Edna White of Ohio State University; The Organization and Place of Marketing in the High School, by Miss Alice M. Loomis, University of Nebraska.

Important Meetings.—Some of the meetings to be held in the near future that would be of special interest to Home Economics workers are the meetings of The Department of Superintendence of the N. E. A., to be held at Detroit, Michigan, February 21 to 26. Several allied associations are to meet at the same time. The American Home Economics Association will hold a council meeting and also a general conference.

The Thirteenth Annual Meeting of The Religious Education Association will be held in Chicago, at the Congress Hotel, February 28, 29, March 1, 2, 1916. Certain sessions will be devoted to the interests of the home. The Religious Education Association has from its beginning maintained a home department.

The American Chemical Society meets at Urbana, Illinois, with the University of Illinois, April 18-21. A program of papers on Chemistry and Home Economics is planned for one of the sessions.

The National Conference of Charities and Correction holds its annual meeting at Indianapolis, May 10 to 17.

The General Federation of Women's Clubs holds its biennial in New York City, May 23–June 1.

Dr. C. F. Langworthy was appointed as delegate from the American Home Economics Association to the Second Pan American Scientific Congress held in Washington, December 27, 1915 to January 8, 1915. Miss Van Rensselaer was designated as alternate delegate. Her name appeared on the program as one of the speakers.

Brief Notes.—The American Association for the Study and Prevention of Infant Mortality held its sixth annual meeting in Philadelphia, November 10 to 12, with sessions on Pediatrics, Obstetrics, Economic Aspects of Infant Welfare, Eugenics, Care of Homeless Babies, and Nursing and Social Work.

Instead of having the usual exhibits the committee arranged for the Association to visit the various baby-saving activities in Philadelphia.

Miss Gwendolyn Stewart, formerly instructor in physiological chemistry at the Santa Barbara Normal School of Manual Arts and Home Economics, is spending this year in the Physiology Department at Stanford University.